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# The impact of internal service quality on job satisfaction in the hotel industry

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Service quality is a key factor for success in any hotel. Many researchers have conducted studies on service quality, but only a few studies have been conducted on internal service quality (ISQ) in general, and in the hotel industry in particular. Since there is no general agreement among researchers on the measurement of ISQ, many studies have used SERVQUAL instrument to measure the employees' perceptions of ISQ. The purpose of this study is to explore the influence of ISQ on employee's job satisfaction in five-star hotels in Jordan. The current study was carried out by measuring the data gathered through a seven-point Likert scale. The quantitative survey method was applied, and therefore the SERVQUAL instrument was used to measure ISQ, and the Job Satisfaction Survey (JSS) was used to measure job satisfaction. Data obtained from a sample of 238 respondents drawn from 14 five-star hotels in Jordan were analysed with the SPSS software based on descriptive statistics. The study's findings indicated that the ISQ of five-star hotels in Jordan has a significantly positive influence on an employee's job satisfaction. These findings support the hypothesis that there is a positive relationship between ISQ in the hotel industry and industry employees' job satisfaction.

Keywords: hotels, internal service quality, job satisfaction

## Introduction

Competition is increasing among hotels, and therefore hotel managers are focusing on improving service guality to put them at a competitive advantage (Min & Min, 1997). In the hotel industry, service becomes one of the most important factors for gaining a sustainable competitive advantage and customers' confidence in the highly competitive marketplace (Markovic & Raspor, 2010; Naseem et al., 2011). A hotel cannot survive in this competitive environment until it satisfies its customers with good quality service (Narangajavana & Hu, 2008). However, service quality is a core of service management (Chen, 2008), and it is substantial when it comes to defining organisational success (Naseem et al., 2011). A successful hotel delivers excellent quality service to customers, and therefore service quality is considered the life of the hotel (Min & Min, 1997). Service quality is a way to manage any hotel in order to satisfy its internal and external customers with good quality service, and to survive in the competitive environment (Gržinić, 2007; Narangajavana & Hu, 2008).

The concept of the internal customer emerged during the mid-1980s, suggesting that every employee or department within a company has customers, both internal and external, and that employees (internal suppliers) should provide services that meet the expectations of all their customers (Nagel & Cilliers, 1990). Internal customer can be defined as any employee who is receiving services or products by [from] other members within the organisation (Nagel & Cilliers, 1990; Zeithaml & Bitner, 1996). This means that meeting the requirements exactly as customers' needs are the quality resources for many organisations. Employees are internal customers of the organisation to

carry out their jobs (Zeithaml & Bitner, 1996), and therefore employees view themselves as customers (Farner et al., 2001). Furthermore, employees are one of a sightseeing hotel's major assets, and the factor that most affects a hotel's operating performance is its employees' ability to provide services that generate a "sense of value" approved by customers, and therefore hotel employees offering customers excellent quality services is a vital part of a hotel's survival (Tsaur & Wang, 2001).

According to Heskett et al.'s model (1994), the "Service-Profit Chain" links an organisation's internal service quality with employee satisfaction. Internal service quality is the perceived level of satisfaction an employee experiences with services offered by internal service providers. In addition, internal service quality refers to employees' perception of the quality of service they receive from or offer their colleagues (Hallowell et al., 1996). Thus, a hotel hopes to make external customers satisfied with the services, but it must first satisfy the internal customers (employees), because high quality internal services improve an employee's job satisfaction, which in turn encourages employees to render services with an aggressive and enthusiastic work attitude. This bolsters the satisfaction of external customers, and eventually enhances hotel performance (Wang, 2012). Nowadays, service quality is considered a common concept in business literature and plays a significant role in employee satisfaction.

The purpose of this study was to verify and understand whether the internal service quality (ISQ) of Jordanian five-star hotels has an influence on an employee's job satisfaction. The objectives of the study were to better understand: (1) the level of ISQ as perceived by employees in hotels; (2) the level of job satisfaction among employees in hotels; and (3) whether or not the ISQ has a positive effect on employee's job satisfaction.

## Literature review Internal service quality (ISQ)

The notion of internal service quality (ISQ) was first proposed by Sasser and Arbeit (1976) who considered employees as the internal customers. But, the management of ISQ can be traced back to Ishikawa's (1985) concept of the voice of the customer (Brandon-Jones & Silvestro, 2010). The ISQ is defined as the perceived quality of service provided by distinctive organisational units, or the people working in these, to other units or employees within the organisation (Stauss, 1995; Back et al., 2011). It can be defined as the service provided between different organisational departments (Kang et al., 2002). Thus, Hallowell et al. (1998) believed that an organisation or business wishing to deliver good quality external services must first offer satisfying internal services to meet the needs of employees.

In the "Service-Profit Chain" conceptual pattern, Heskett et al. (1994) noted that the quality of internal services involves the design of the workplace and content, the recruitment/ development/rewards/recognition of employees, and the tools for customer services. Improvement in the quality of internal customer service leads to improvement in the quality of external customer service. The concept establishes the relationship between internal customer service quality and employee satisfaction. Thus, many researchers argue that providing a better service to the internal customers will lead to a higher quality service provided to external customers (Bouranta et al., 2005). Furthermore, ISQ is the satisfaction an employee shows for the services obtained from internal service providers (Hallowell et al., 1996).

Attempts to measure ISQ follow two common approaches. The first is to adopt a gap-based measure of ISQ, usually through the application of the SERVQUAL scale (Parasuraman et al., 1988). The second approach has been for researchers to develop perceptions-only measures of ISQ, usually from scratch. Although there is disagreement among researchers about the measurement of ISQ, several instruments have been developed to measure the ISQ, such as SERVQUAL, SERVPERF, INTSERVQUAL and INSQPLUS.

Due to the specificities of services in the hotel industry (i.e. impalpability, inseparability from provider and receiver of service, impossibility of storage), a specific concept called SERVQUAL (SERVices QUALity Model) was created by Parasuraman et al. (1985; 1988), and has become the most popular instrument for measuring service quality. The model has been applied in various service industries, including tourism and hospitality. In the original SERVQUAL instrument, Parasuraman et al. (1985) define service quality through ten dimensions, which they later summarise to five (1988), namely:

- *Tangibility* (physical facilities, equipment and personnel appearance): consists of the pleasantness of the companies' physical facilities, equipment, personnel, and communication materials. Tangibility includes the external appearance of the customer staff;
- *Reliability* (ability to perform the promised service dependably and accurately): means that the service company offers accurate and flawless service to customers' directly from the first time on, and does so in the promised time;
- *Responsiveness* (willingness to help customers and provide prompt service): means the willingness of the employees in the service companies to help customers, answer their

requests, tell customers when the service is provided, and provide prompt service;

- Assurance (knowledge and courtesy of employees and their ability to gain trust and confidence): means that the behaviour of the employees makes the customers trust the company and feel safe. In addition, employees have the ability to answer the customers' questions and are always polite; and
- *Empathy* (providing individualised attention to the customers): means the employees' ability to understand customers' problems, acting for their benefit and treating them as individuals. Empathy includes that the opening times of the company are suitable.

The SERVQUAL model offers a suitable conceptual frame for the research and service quality measurement in the service sector. It is based on the customer's evaluation of service quality. The described concept is based on the gap between the expectations and the perceptions of customers. Service quality represents a multidimensional construct. Each dimension of SERVQUAL has different features. The five dimensions are described by 22 items for assessing customer perceptions and expectations regarding the quality of service, and the respondents used a seven-point scale (1 = fully agree; 7 = fully disagree) to indicate what they expected of the service and how they perceived it. The level of service quality is represented by the gap between perceived and expected service.

Compared with external service quality research, there is relatively limited research focused on ISQ measurement. This is partly a consequence of the marketing background of many service quality academics (lacobucci et al., 1994) and the multidisciplinary nature of internal service (Hallowell et al., 1996; Farner et al., 2001). However, there are differences between external and internal customers which have led some academics to call into question the transferability of external service quality measurement approaches to internal services. Thus, there is debate concerning alternative approaches to ISQ measurement.

Internal customers are professional consumers of internal services. They are far more knowledgeable than most external customers with regard to service provision (Marshall et al., 1998), and they may be in a stronger position to assess credence properties such as the competence of service providers. This view was confirmed by a number of internal SERVQUAL applications that have dropped the tangibles dimension when measuring ISQ (Heskett et al., 1997; Kuei, 1999; Large & König, 2009).

Frost and Kumar (2001) modified the items of the SERVQUAL scale in order to measure employee perceptions toward service quality. They called it INTSERVQUAL. Their study was conducted at a major international airline and measured internal customers' expectations and perceptions. The results indicated that the scales – front-line staff (customer-contact personnel) expectations of support services and their perceptions of the support staff's performance – can be successfully used to assess the gap between front-line staff perceptions and expectations. While SERVPERF uses the same 22 perception items as SERVQUAL, it does not include the set of expectation statements.

Some researchers stress the need for a new instrument that is positioned more closely to internal customer needs and expectations, and they attempt to investigate the dimensions of internal quality. Others suggest that it is appropriate to measure internal service quality by using instruments developed to measure external service quality, taking into consideration the differences between internal and external customers. Kang et al. (2002) described another undertaking using the SERVQUAL instrument as a tool for measuring internal service quality. In any case, SERVQUAL's usefulness for measuring ISQ is almost universally accepted (Edvardsson et al., 1997; Kang et al., 2002).

The SERVQUAL instrument has been the predominant method used to measure customer's perception of service quality. However, Reynoso and Moores (1995) were the first to attempt to utilise the SERVQUAL instrument as a measure of ISQ, and justified the transferability of this instrument from external to internal customers. Since there is no general agreement on a specific measurement tool for the ISQ concept, most of the studies have used the SERVQUAL to measure it. Furthermore, Kang et al. (2002) concluded that the SERVQUAL items can be modified to measure the employees' perceptions of ISQ and assess the quality of internal service provided to employees of different departments within the same organisation.

As can be seen from the previous studies, the SERVQUAL instrument has been the predominant method used to measure internal customers' perceptions of service quality. The present study can also be considered an attempt to use SERVQUAL for measuring internal service quality.

#### Employees' job satisfaction

The concept of "employee's job satisfaction" was first put forth by Hoppock (1935) as the subjective reactions or satisfaction displayed by employees physically and mentally with regard to the working environment. Job satisfaction is defined by Locke (1976, p. 1300) as "a pleasurable or positive emotional state resulting from one's job or job experiences", or an employee's feelings and attitudes toward his/her job (Schlesinger & Zornitsky, 1994; Armstrong, 2003). Furthermore, Armstrong (2003) mentions that if people have favourable and positive attitudes towards their job, this means job satisfaction, but if they have unfavourable and negative attitudes towards their job, this means job dissatisfaction. The above explanations show that job satisfaction represents the positive attitudes of people and their feelings about their job, because they like their job.

Job satisfaction is the result of a worker explaining the distinctive nature of his/her job based on a particular referential dimension, and whether a specific work situation affects job satisfaction involves many other factors, such as the comparison of good/bad jobs, comparison with colleagues, how competent an individual is, and the previous work experience of a worker (Smith et al., 1969). Moreover, Spector (1997) stated that the antecedents of job satisfaction are categorised into two groups. The first group includes the job environment itself and some factors related to the job. The second includes individual factors related to the person who will bring these factors to the job, including previous experience and personality. Often both groups of antecedents work together to influence job satisfaction, and therefore job satisfaction is determined by a combination of both individual characteristics and job environment characteristics.

Herzberg at al.'s (1959) theory argued that when the level of hygiene factors (i.e. working conditions, interpersonal relations, supervision, job security, benefits, company policies and management, and salary) was unacceptable for employees, job dissatisfaction occurred, but an acceptable level did not lead automatically to job satisfaction and prevented dissatisfaction. Motivating factors which included recognition, advancement, achievement, autonomy, work itself and responsibility led to job satisfaction. Clearly the theory argued that satisfaction factors and dissatisfaction factors are distinct and separate, so that the opposite of "satisfaction" is not "no satisfaction" and the opposite of "dissatisfaction" is not "no dissatisfaction", and therefore removing dissatisfaction factors did not lead to job satisfaction. On the other hand, the theory of Smith et al. (1969) proposed five dimensions of job satisfaction, namely the job itself, job promotions, salary, supervisors, and co-workers.

Job satisfaction is widely known as an employees' feelings toward their jobs, or the group of attitudes about different facets that relate to the job. The global feeling approach is used when the bottom line or overall results are of interest. But the facets approach is employed in order to determine which job items provide job satisfaction or job dissatisfaction. This approach was concerned with any item that related to the job of assessing job satisfaction (Spector, 1997). With reference to Locke (1976) and Spector (1997), the facets of job satisfaction were classified into four groups: rewards, such as fringe benefits or pay; other people, such as supervisors or co-workers; the organisation itself; and the nature of the work itself.

Spector's (1985) Job Satisfaction Survey measured the level of job satisfaction based on job facets by using a six-point Likert-type scale, including varying degrees of agreement and disagreement with the statements. Therefore, each statement had six response options starting from "disagree very much" (1) to "agree very much" (6). The survey was designed to measure job satisfaction based on nine job facets including: pay (salaries and raises); promotion (promotion chances at work); supervision (supervision relations); fringe benefits (organisation's benefits); contingent rewards (organisation's rewards); operating conditions (conditions of work); co-workers (relationships among employees); the nature of the work (the job itself); and communication (communication among employees). This survey contained 36 statements that describe nine job facets, four statements for each one. Job satisfaction was measured by calculating the total score for each job facet, and for all job facets together (Spector, 1997). Spector (1985) indicated that the respondents were different in their job facets of satisfaction. This meant that people had different feelings toward their job facets.

#### Internal service quality (ISQ) and employee's job satisfaction

Heskett et al. (1994) noted from the "Service-Profit Chain" conceptual pattern that a good ISQ will help enhance employee satisfaction. Thus, many scholars believe that an organisation must first improve the ISQ in order to render good quality external services, and it is imperative that the organisation provides satisfying tools, policies and procedures, teamwork, management, goal-oriented cooperation and training, and further increases employees' job satisfaction (Hallowell et al., 1996). Furthermore, Heskett et al. (1994) argued that the quality of internal work affects employee's job satisfaction. Hallowell et al. (1996) considered the ISQ extremely important

According to the "Service-Profit Chain" concept, the internal customer service quality dimensions are workplace design, job design, employee selection and development, employee rewards and recognition, and tools for serving customers (Heskett et al., 1994). These dimensions are similar to the four managerial processes that are linked to employee satisfaction and retention (supervision, benefits, work design, and work conditions), and are known as the drivers of employee satisfaction (Rust et al., 1996).

Several studies have been conducted to explore the link between ISQ and employee job satisfaction. For example, Khan et al. (2011) studied the link between perceived human resources internal service guality practices with employee job satisfaction in public and privatised banks. The study found that employee selection, employee training and development, work design, job definition, employee rewards and compensation reported high, positive and significant dimensionality to internal service quality in human resource management. The study further found that internal service quality in human resources has a positive and significant effect on employee job satisfaction. The employees' selection and their rewards and recognitions, their training and development, work design and job definition are the most important human resource management areas for enhancing the employees' job satisfaction. Another study, conducted by Pantouvakis (2011), indicated that internal customers' job satisfaction depends on the soft (interactive and physical) ISQ dimensions, as well as the hard ISQ dimensions. Managers of service firms should focus on both soft and hard dimensions of internal service quality, as they influence job satisfaction.

In the tourism and hotel industry, Seyyedi et al. (2012) carried out a study to determine the industry's most important service attribute, as well as investigate the strength of the relationship between the internal customer service quality and employee satisfaction. The respondents consisted of 151 frontline employees of tourisms companies from a sample of 157. The results showed that "Interpersonal Relationship" is the most important dimension of the internal customer service quality, and "Rewards and Recognitions" the least important. There was a positive and significant relationship between employee satisfaction and internal customer service quality. Similarly, Wang (2012) investigated the influence of a good internal service quality on employee job satisfaction in international tourist hotels in Taiwan. A sample was entry-level workers and section chiefs (or employees at higher levels) in the room service and catering departments. Findings from this study showed that at international tourist hotels in Taiwan a satisfying internal service quality has a significant interactive influence on employee job satisfaction.

A recent study was conducted by Pasebani et al. (2012), and investigated the relationship between internal service quality and job satisfaction in sport organisations in Iran. 371 managers and sport organisation experts were selected using random sampling. The results of a correlation test and regression analysis showed that there is a significant positive relationship

between internal service quality and job satisfaction. Dhurup (2012) explored internal service quality and the relationship with internal customer satisfaction. The survey method, with a sample of 229 randomly selected employees, was used to collect data from different departments in a petrochemical company. The internal service quality dimensions comprise five dimensions, namely: credibility; accessibility/tangibility; preparedness; reliability; and competence. In terms of the regression analysis, the dimensions of accessibility and tangibility, reliability and competence exerted the strongest influence on internal customer satisfaction. Recently, Naser et al. (2013) investigated the relationship between internal service quality and faculty members' job satisfaction at Islamic Azad University in Iran. The findings showed that between internal service guality and job satisfaction there is significant positive correlation. Also among internal service quality levels, a positive relationship between internal service quality at organisational level and job satisfaction was significant. Other studies have found similar results. For example, Nazeer et al. (2014) investigated that the internal service guality has a significant positive effect on job satisfaction among faculty members in universities in Pakistan, and Sharma et al. (2016) also found that the internal service quality has a significant positive effect on employee job satisfaction in a manufacturing unit in Guangdong Province in China.

The proposed model of this study is to explore the impact of ISQ on job satisfaction of employees working in five-star hotels. ISQ is an independent variable and job satisfaction is a dependent variable, as shown in Figure 1. Based on the proposed model, one hypothesis was developed to identify the impact of ISQ on employee's job satisfaction, as follows:

H1: The internal service quality has a positively significant influence on employee's job satisfaction.

Figure 1 reflects the fact that employee job satisfaction, as measured in terms of pay, promotion, supervision, fringe benefits, contingent rewards, operating procedure, co-workers, nature of the work and communication can be influenced by ISQ.

#### **Research approach**

This study was conducted by using the questionnaire method. Hotel employees' perceptions were measured with a self-administered questionnaire. The questionnaire was designed on the basis of multidimensional measurement of ISQ and job satisfaction from employees' perspectives. The questionnaire consisted of three parts. The first part measured employees' perceptions of hotel attributes using a modified SERVQUAL model. The second part measured employees' job satisfaction. Internal service quality perceptions and job satisfaction were measured on a seven-point Likert-type scale ranging from 1 "strongly disagree" to 7 "strongly agree". The third part was designed to capture the respondents' demographic characteristics of age, gender, educational level, years of experience, level of employment, and the department they worked in.

The ISQ section was mainly measured by using a modified SERVQUAL, developed by Parasuraman et al. (1985) to measure service quality through five service quality dimensions, namely: tangibility; reliability; responsiveness; assurance; and empathy. The original items were slightly modified to suit the hospitality

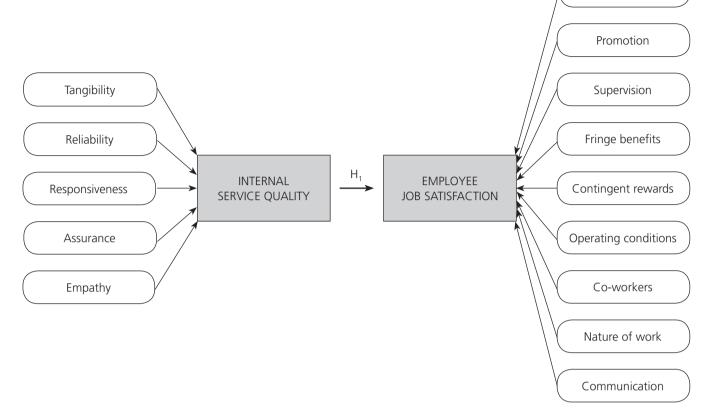


Figure 1: The hypothesised model of this study

setting. The ISQ section contained 22 items in total, and the job satisfaction section contained 36 items based on nine job facets adapted from the Job Satisfaction Survey developed by Spector (1985) to measure job satisfaction (i.e. employee's job satisfaction is a combination of "satisfactions": "pay"; "promotion"; "supervision"; "fringe benefits"; "contingent rewards"; "operating conditions"; "co-workers"; "nature of work"; and "communication"). This section contained 36 items in total.

#### Sampling and data collection

The target population of the survey were employees in five-star hotels in Jordan during mid-2013. Questionnaires were distributed in 14 five-star hotels after the hotel managers agreed to participate in the study. Human resource managers were asked to administer the questionnaires to their employees, and to collect them after completion. In each hotel, questionnaires were randomly distributed to the employees. Of 247 returned questionnaires, nine were not included in the analysis because of incompleteness. Thus, the data analysis is based on a sample of 238 valid guestionnaires. The response rate was 58 per cent. SPSS was used to analyse the data. Descriptive statistical analysis was used to describe respondents' demographic characteristics and to evaluate service quality perceptions of employees. Furthermore, a reliability analysis was performed to test the reliability of the scale and the inner consistency of extracted factors. For this purpose, Cronbach's alpha coefficients were calculated.

## Findings

The questionnaires were personally delivered to 425 employees working in five-star hotels, of which 238 were usable for analysis. The demographic characteristics of the respondents are presented as follows: The studied sample was 89.5% males and 10.5% females. 42% of the respondents were between 26 and 35 years old. A majority (55%) of the respondents held bachelor degrees, while 4% were Masters degree holders. 35% of the respondents had work experience ranging between 2 and 4 years, and 27% had 5 to 7 years of experience.

## Data analysis

The Cronbach's alpha coefficient was calculated for each scale to test the reliability and the degree to which the items are tapping the same concept as shown in Table 1. Results show the Cronbach's alpha for job satisfaction scale: pay is 0.762; promotion is 0.819; supervision is 0.786; fringe benefits is 0.743; contingent rewards is 0.684; operating conditions is 0.837; co-workers is 0.776; nature of work is 0.842; and communication is 0.762. Moreover, Cronbach's alpha for the ISQ scale shows that tangibility is 0.752, reliability is 0.647, responsiveness is 0.843, assurance is 0.812, and empathy is 0.786. It is noticeable that the Cronbach's alpha values for the scales were between 0.647 and 0.843. That is well above the minimum value of 0.60, which is considered acceptable as an indication of scale reliability (Hair et al., 2006). Thus, these values suggest good internal consistency of the factors. Finally,

Pay

Cronbach's alpha value for the overall job satisfaction is 0.962, and for the overall ISQ, it is 0.847. These values represent a high consistency and reliability among statements in each variable.

The results of the descriptive statistical analysis of employees' perceptions in the hotel industry are shown in Table 2. The range of ISQ perception items and job satisfaction items were from 1 ("strongly disagree") to 7 ("strongly agree"). The overall mean score for job satisfaction items was 5.875; while

Table 1: The results of internal consistency test of the instrument

Variable	Number of items	Cronbach's alpha	
Construct 1: Job satisfaction			
Factor 1: Pay	4	0.762	
Factor 2: Promotion	4	0.819	
Factor 3: Supervision	4	0.786	
Factor 4: Fringe benefits	4	0.743	
Factor 5: Contingent rewards	4	0.684	
Factor 6: Operating conditions	4	0.837	
Factor 7: Co-workers	4	0.776	
Factor 8: Nature of work	4	0.842	
Factor 9: Communication	4	0.762	
Overall job satisfaction	36	0.962	
Construct 2: ISQ			
Factor 1: Tangibility (ISQT)	6	0.752	
Factor 2: Reliability (ISQRL)	3	0.647	
Factor 3: Responsiveness (ISQRS)	5	0.843	
Factor 4: Assurance (ISQA)	4	0.812	
Factor 5: Empathy (ISQE)	4	0.786	
Overall ISQ	22	0.847	

 Table 2: Description of job satisfaction and internal service quality

Statistic variable	Mean	Std. deviation
Job satisfaction	5.420	0.882
Factor 1: Pay	5.510	0.953
Factor 2: Promotion	5.328	0.921
Factor 3: Supervision	5.421	0.954
Factor 4: Fringe benefits	5.524	0.842
Factor 5: Contingent rewards	5.422	0.986
Factor 6: Operating conditions	5.532	0.973
Factor 7: Co-workers	5.621	0.982
Factor 8: Nature of work	5.252	0.964
Factor 9: Communication	5.219	0.938
Internal Service Quality	5.850	0.621
Factor 1: Tangibility (ISQT)	5.670	0.632
Factor 2: Reliability (ISQRL)	5.992	0.487
Factor 3: Responsiveness (ISQRS)	5.954	0.510
Factor 4: Assurance (ISQA)	6.020	0.463
Factor 5: Empathy (ISQE)	5.724	0.602

Note: All items used a 7-point Likert scale with (1 = strongly disagree and 7 = strongly agree)

Table 3: Correlations between internal service quality and job satisfaction

the overall mean score for ISQ items was 5.420. These scores indicate rather high perceptions of hotel employees regarding job satisfaction and ISQ.

The mean scores for all dimensions of job satisfaction ranged from 5.252 to 5.621, and therefore all employees were moderately satisfied with their jobs and all the dimensions of job satisfaction. It also found that the highest satisfaction among employees was for co-workers, operating conditions, and fringe benefits respectively, but the lowest satisfaction was for communication and nature of work. The mean scores for all dimensions of ISQ ranged from 5.670 to 6.020. This indicates that ISQ in five-star hotels is very good. Furthermore, the results reported that "Assurance" had the highest mean (6.020) that reflects employees' behaviour that makes customers trust the hotel and make them feel safe, and the ability of employees to answer customers' questions and always be polite. The lowest mean (5.670) was for "Tangibility", as shown in Table 2.

#### Measurement model

In examining the relationship between the ISQ and job satisfaction, since the data show a normal distribution, the Pearson correlation test was run to analyse the data. The level of relationship between ISQ and employees' job satisfaction is reported in Table 3.

As illustrated in Table 3, the results of correlation analysis showed a significant positive relationship between ISQ and job satisfaction from the viewpoint of employees (r = 0.582, p < 0.001). In other words, there is a significant positive correlation between increased ISQ and job satisfaction of employees. The results, however, explored the relationships between the ISQ dimensions and job satisfaction. It was found that there were significant relationships between ISQ dimensions and employees' job satisfaction. The correlations between tangibility (r = 0.552), reliability (r = 0.526), responsiveness (r = 0.531), assurance (r = 0.539), and empathy (r = 0.517) are positive at p < 0.01, indicating that ISQ is significantly correlated to employee's job satisfaction.

Correlation, however, only measures a linear relationship and does not necessarily infer a causal relationship between variables. The study proceeded to predict causal relationship between ISQ and employee's job satisfaction with the use of linear regression analysis. Table 4 reports on the results of the linear regression analysis in order to establish the predictive power of ISQ on employee job satisfaction. The ISQ was used as the independent variable, and job satisfaction was used as the dependent variable. In terms of the relationship between the ISQ and job satisfaction, the  $R^2 = 0.338$  suggests that the ISQ explained 33.8% of the variance in the employees' overall job satisfaction. The ISQ was statistically significant

Factor	Tangibility (F1)	Reliability (F2)	Responsiveness (F3)	Assurance (F4)	Empathy (F5)	Total ISQ	Job satisfaction
F1: Tangibility	1						
F2: Reliability	0.627**	1					
F3: Responsiveness	0.643**	0.610**	1				
F4: Assurance	0.682**	0.625**	0.676**	1			
F5: Empathy	0.675**	0.586**	0.629**	0.583**	1		
Total ISQ	0.667**	0.631**	0.646**	0.644**	0.622**	1	
Job satisfaction	0.552**	0.526**	0.531**	0.539**	0.517**	0.582**	1

\*\*Correlation is significant at the 0.01 level (2-tailed)

 Table 4: Regression analysis between internal service quality and job satisfaction

Independent variable			Dependent va	ariable: Job satisfacti	on		
	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	F	β	t	Sig.
Internal service quality	0.582	0.338	0.326	180.787	0.582	13.226**	0.000

at p < 0.000, and depicted a positive relationship with employee's job satisfaction. The beta coefficient ( $\beta = 0.582$ ) in Table 4 indicates that ISQ makes a significant contribution to employee's job satisfaction.

As can be seen from Table 4, ISQ is considered a moderately significant predicator of employees' job satisfaction. The regression results indicate that ISQ is positively related to employee's job satisfaction ( $\beta = 0.582$ , p < 0.01). More specifically, ISQ explains 33.8% of the variance in employee's job satisfaction. Consequently, the overall statistical results indicate that ISQ is associated with employee's job satisfaction positively and significantly, thus the study's hypothesis (H1) is accepted.

## **Discussion and conclusions**

The issue of quality is one of the major challenges that organisations, especially hotels, encounter. Although there is a large amount of literature on service quality, there is limited empirical evidence of the employees' perceptions of ISQ on employees' job satisfaction generally and specifically in the Jordanian hotels. The quality of services is typically investigated in terms of the viewpoint of external customers. ISQ is assumed as one of the important factors in the efficiency of modern dynamic organisations and particularly hotels, because focusing on that leads to employee's job satisfaction of an organisation. The importance of ISQ has been recognised in industrial and business sectors, and only recently in the hotel industry. Therefore, the present study set to investigate the impact of ISQ on employees' job satisfaction from the viewpoint of employees working at five-star Jordanian hotels.

The study's results show a significant positive correlation between ISQ and employee's job satisfaction. Research results show that ISQ is a strong predictor affecting employee's job satisfaction. This is consistent with the findings of Heskett et al. (1994), Hallowell et al. (1996), Khan et al. (2011), Pantouvakis (2011), Wang (2012), Pasebani et al. (2012), Dhurup (2012), Seyyedi et al. (2012), Naser et al. (2013), Nazeer et al. (2014) and Sharma et al. (2016). Based on the above discussion, results can be concluded by supporting the study's hypothesis that there is a positive relationship between ISQ and employee's job satisfaction. The present findings also asserted that improved ISQ in hotels can improve employee's job satisfaction.

## Managerial implications

Researchers consider the ISQ within the organisation as one of the most important dimensions in service quality, and which in due time causes cost reduction and profitability for the organisation. Providing high quality services among the employees play an important role in the interactions of these employees with the external customers. The internal customers (employees) of the organisation constitute a part of a cycle that eventually affects the external customers' satisfaction and leads to the success or failure of the organisation, and therefore focusing on the ISQ affects the other effective variables of service quality provided to the external customers.

This study concluded that the ISQ has a significant interactive influence on employee's job satisfaction at five-star Jordanian hotels. As a result, managers are encouraged to provide high quality services to employees. Moreover, ISQ should be established as a long-term goal for hotels. Considering the importance of ISQ, managers at hotels are recommended to support and internalise ISQ as part of their organisational culture. Furthermore, there are some important managerial implications from this study which suggest that managers should be engaged more in implementing the concept of ISQ.

#### Limitations and future studies

Some limitations that exist in this study must be identified. These limitations include the accessibility to all hotel departments, and the inability of the researchers to contact employees and explain the importance of the questionnaire. Finally, further research is suggested to investigate the link between ISQ and employee's motivation and performance.

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