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Assessing service quality in secondary schools: the case of Jordan

Rateb Sweis Hannah Diab Firas Izzat Mahmoud Saleh Taghrid Suifan Samer Eid Dahiyat

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# Assessing service quality in secondary schools: the case of Jordan

Service  
quality in  
secondary  
schools

1207

Rateb J. Sweis, Hannah Diab, Firas Izzat Mahmoud Saleh,  
Taghrid Suifan and Samer Eid Dahiyat  
*Department of Business Management,  
The University of Jordan, Amman, Jordan*

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## Abstract

**Purpose** – Since conducting the literature review revealed that assessing quality in secondary schools has been an unexplored territory, and where most educational service quality research studies have mainly focussed on assessing quality from a student’s perspective in higher education, comes into play with a two-fold objective: first, to identify the quality dimensions most vital to students in a developing country such as Jordan, and then to develop a framework consisting of these dimensions; and second, to investigate the extent of satisfaction of students enrolled into international qualifications in Jordan by measuring the gap between expectations and perceptions. The paper aims to discuss these issues.

**Design/methodology/approach** – A focus group meeting consisting of experts in the field of secondary school education, specifically in internationally recognized qualifications, was conducted. These expert’s objective input helped develop the framework for assessing quality in secondary schools.

**Findings** – A framework was developed specifically to suit private secondary schools in Jordan with reference to the SERVQUAL model. The resulting questionnaire is intended to be distributed to over 200 students enrolled in an international qualification program among private schools in Jordan.

**Research limitations/implications** – The framework could be considered as a form of reality check for schools supplying school administrations in Jordan with a suitable tool to measure whether they are exceeding their students’ expectations. This framework might not be applicable to public schools in Jordan, since it was customized to be applied in schools who have adopted international qualification(s).

**Originality/value** – This study contributes to quality service research that addresses the context of high schools in a developing Middle-Eastern country.

**Keywords** Jordan, Service quality, SERVQUAL, International qualification programs, Private secondary schools

**Paper type** Research paper

## 1. Introduction

Stemming from the “customer is king” school of thinking, it is true that customers are key focus to any thriving business, not least in the service sector. Simplistically put, if customers are kept satisfied and their expectations are met, then the organization will have a relatively better chance to be in a sound business.

“When a customer enters my store, forget me. He is king,” though once stated by the father of modern advertising, John Wanamaker, this motto is now the sole focus of many managerial disciplines applied across various sectors and organizations. Among these disciplines has emerged what is now known as “service quality.”

Service quality has been gaining spotlight ever since the very well-known SERVQUAL model was proposed 26 years ago. Though a good amount of research had adopted this solid framework for measuring quality in service sectors, SERVQUAL has had a good share of critiques. Though an in-depth discussion of such critiques is beyond this study’s



scope of work, it can be argued, however, that this model offers an excellent generic tool that serves as a firm base that is flexible enough so that its dimensions can be tailored to suit the industry under study. This has been called out for and applied by many researchers (such as Dabholkar *et al.*, 1996; Frochot and Hughes, 2000; Sureshchandar *et al.*, 2002) who support building up from SERVQUAL a customized framework that is more in tune to measure service quality in a certain context setting.

And though a vast amount of research in service quality has been conducted in many sectors, the educational sector is steadily gaining popularity. On the other hand, conducting the literature review revealed that the majority of those studies mainly applied service quality tools to higher education. The lack of research measuring service quality in schools was, nonetheless, obvious.

The Royal Hashemite Kingdom of Jordan, though considered among developing countries, is well-recognized in the MENA region for its high-quality education system. Jordan's extensive efforts investing in the educational sector has evidently paid off. According to UNICEF statistics, the youth (15-24 years old) literacy rate percentage for both genders (on average) was an impressive 99.2 percent between 2008 and 2012. Moreover, school participation – measured in terms of net attendance percentages – (on average) for both primary and secondary students – were reported as 98 percent and 87 percent, respectively, between the years 2008 and 2012.

Moreover, Jordan is considered as a youthful country with 62 percent of its total population aged between 15 and 64 years old, and 34 percent between under 14 years of age (World Bank, 2013). So it is clear that Jordan indeed requires a solid education foundation to cater to this population increase, and that is exactly what the government is emphasizing in all its strategies. Today there are 4,280 schools in Jordan, and the government has succeeded in providing every village and community with ten or more school-going children with a school resulting in a rapid spread of facilities that enables citizens in less fortunate and remote areas to gain access to education.

Furthermore, in midst of the political instability that is occurring in – virtually all its neighboring countries such as Syria, Iraq, Palestine and Egypt, the influx of neighboring citizens that seek refuge in Jordan are tremendously increasing on a daily basis and, as a result, Jordan is also expected to cater to these refugees in terms of food, shelter, healthcare and education.

The UNHCR forecasts the number of refugees in Jordan by January 2015 to be around one million people. Among these are 747,360 Syrians and 58,050 Iraqi citizens. During Iraq's previous decade of ongoing political turbulences, many Iraqis, especially from wealthy parts of the population, sought refuge in Jordan. These Iraqi citizens heavily invest in their children's education. The UNFPA study of Iraqis in Jordan revealed that the Iraqi children who are enrolled in school; about three in four attend private schools, while about one in four Jordanian children are enrolled in private schools (World Bank, 2013).

The cost of sending children to private schools is quite pricy for a low per-capita income country such as Jordan. Nevertheless, this has not hindered the increasing popularity of private schools which are considered to be as the latest fad in Jordan. About 20 percent of children are enrolled in private schools (which are approximately 35 percent of all schools in Jordan) and the numbers are continuously growing. Top-private schools in Jordan are always keen on delivering the finest education services for their students and among their endeavors, they are exponentially seeking to adopt international educational programs. For instance, and according to the Ministry of Education, there are 48 schools in Jordan that are affiliated with the British

Council under the British Program ( GCSE, IGCSE, international GCSE, GCE, IAL, advanced subsidiary and A-levels from both UK accrediting boards; Cambridge International Examinations and Pearson Edexcel).

There are also 13 schools that have the SAT program and 12 private schools that have adopted the International Baccalaureate Diploma Program (IBDP). It is worthy of mentioning that all these 73 international schools are private schools except for one.

Because of the shift of student enrollment from government to private schools with international programs, it is safe to conclude that Jordan is witnessing structural reform in its educational system. And it is also clear that Jordanian's faith in government schools is declining and parents are insisting on enrolling their children in – what they believe to be – higher quality educational institutions, even if that means extra financial burden for the average Jordanian family. This is where this study comes in an attempt to construct a framework customized specifically for the context of a developing MENA country such as Jordan to find out whether students' expectations of their private schools are fulfilled or not in addition to discovering the dimensions that are most important to students.

This research emphasizes the word “private” as this study will only take into consideration private schools in Jordan, as public schools greatly differ in terms of structure, funding and way of delivering education. This study's main focus will be on measuring the satisfaction of students enrolled in internationally recognized education programs as all top schools in Jordan have adopted one (if not more) of either the British Program, the SAT and/or the IBDP. These schools have already undergone rigor examination boards' inspections and are considered *crème de la crème* of schools in Jordan.

The remainder of this paper is organized as follows: after the introduction, a comprehensive literature review is conducted in four sections: service quality, popular service quality frameworks, industry-specific frameworks and service quality in education. A theoretical framework is then explored and developed through a focus group session conducted with educational specialists who have over 20 years of experience working with private schools who have adopted international qualifications. With the specialist's expertise, a questionnaire was developed that is intended to be randomly distributed among 200-plus students in an internationally recognized qualification program. Finally, the study is wrapped up indicating the implications and conclusions of the study along with recommendation for future research.

## 2. Literature review

This section provides a view on to the concept of service quality, its meaning and development. It then goes on to an in-depth discussion regarding popular frameworks such as the SERVQUAL. Finally, the last section offers a brief about studies conducted to measure service quality in education.

### 2.1 Service quality

The underlying theory is that institutions that continually improve service quality and delivery are more likely to generate high levels of customer satisfaction. As a result, service quality is generally recognized as a critical success ingredient in an organization's attempt to differentiate itself from its competitors (Ladhari, 2009). Research has demonstrated that good service quality leads to existing customer loyalty and retention, the ease of attracting new ones, reduced costs, an enhanced corporate image, positive

word-of-mouth recommendation (Stodnick and Rogers, 2008) and, ultimately, enhanced profitability (Berry *et al.*, 1988; Rust and Zahorik, 1993; Cronin *et al.*, 2000; Kang and James, 2004; Yoon and Suh, 2004). Research indicates how information derived from the customer's experience is critical to the development of an external benchmarking program comprising of both competitive and generic measures of service quality (Smith, 2000).

Though a vast amount of research has been conducted in the field of service quality (Parasuraman *et al.*, 1985; Ghobadian *et al.*, 1994; Hill, 1995; Carman, 2000; Andaleeb, 2001; Sureshchandar *et al.*, 2002; Raajpoot, 2004; Eraqi, 2006), there is yet to exist a unified agreed upon meaning of service quality (Parasuraman *et al.*, 1985; Carman, 1990; Mattsson, 1994; Shahin, 2006).

In many studies, the concept of "service quality" has been linked to customer perception (Dabholkar *et al.*, 1996; Ekinci and Riley, 1998; Frochot and Hughes, 2000; Caro and Garcia, 2007; Wilkins *et al.*, 2007). Perceived service quality is explained as the consumer's judgment regarding a product's overall superiority, based on perceptions of what is received and what is given in reality (Berry *et al.*, 1988). Others have correlated service quality to customer expectations disregarding customer perceptions (e.g. Knutson *et al.*, 1990; Khan, 2003; Markovic, 2006), while the majority measured service quality in terms of the gap between customer perception and expectation (e.g. Parasuraman *et al.*, 1985; Engelland *et al.*, 2000; Wolfenbarger and Gilly, 2003).

From this, perhaps the most appropriate and universally accepted definition early developed by service quality research pioneers, Parasuraman *et al.* (1985), who defined service quality as the degree of discrepancy between customers' normative expectations for the service and their perceptions of the service performance.

### *2.2 Popular service quality frameworks*

One of the earliest attempts to tackle service quality and develop its measurement dimensions is Grönroos (1984), who explains service quality in terms of three dimensions, namely, the technical quality of the outcome of the service encounter, the functional quality of the process itself and the corporate image. Grönroos's work is sometimes referred to in the literature as the "Nordic view" (Ramseook-Munhurrin and Nundlall, 2013).

Now, a year later the "American view" was introduced by Parasuraman *et al.* (1985) who aimed to provide a generic instrument for measuring service quality across a broad range of service categories, and his series of work over the upcoming few years was concluded in the birth of SERVQUAL.

Parasuraman *et al.* (1985) reported that consumers evaluated service quality by comparing expectations (what customers expect to receive) with perceptions (what the customers actually receive) on ten dimensions: tangibles, reliability, responsiveness, communication, credibility, security, competence, understanding/knowing customers, courtesy and access. According to their framework, service quality occurs when expectations are met (or exceeded) and a service gap materializes if expectations are not met. A positive score implies that expectation has been met or exceeded and a negative score implies that expectation has not been met. Gap score can be calculated for each individual statement and/or can be aggregated to give an overall gap score for each dimension (Parasuraman *et al.*, 1988). Customers' expectations and perceptions are therefore very important to service providers as the gap helps in analyzing possible sources of quality-related problems (Ramseook-Munhurrin and Nundlall, 2013).

In their later work in an attempt to simplify the original SERVQUAL model, Parasuraman *et al.* (1988) reduced the original ten dimensions to five: tangibles (the appearance of physical facilities, equipment and personnel), reliability (the ability to

perform the promised service dependably and accurately), responsiveness (the willingness to help customers and provide prompt service), empathy (the provision of individual care and attention to customers) and assurance (the knowledge and courtesy of employees and their ability to inspire trust and confidence).

Each dimension is measured by four to five items (making a total of 22 items across the five dimensions). The SERVQUAL model has been found to be a useful tool for understanding the notion of service quality, as defined by the customer. It allows researchers to measure the gap between customers' expectations of service and their perceived service experiences (Ramseook-Munhurrun and Nundlall, 2013).

SERVQUAL instrument (Parasuraman *et al.*, 1988) is considered among the best and most respected frameworks used to measure service quality across a wide range of applications. It has been widely applied and valued by academics and practicing managers (Buttle, 1996).

SERVQUAL has also been applied in various countries. These have included: Canada (Saleh and Ryan, 1991); USA (Stevens *et al.*, 1995); the UK (Bryslund and Curry, 2001); India (Sureshchandar *et al.*, 2002); Korea; (Kang and James, 2004); the UAE (Badri *et al.*, 2005); Scotland (Donnelly *et al.*, 2006); China (Lai *et al.*, 2007). However, it is clear that studies are lacking in developing countries, not least in the MENA part of the world.

According to Gilmore and McMullan (2009), SERVQUAL and SERVPERF are the most commonly used scales of service quality measurement.

Cronin and Taylor (1992), developers of service performance (SERVPERF), argued that their model demonstrated superiority to SERVQUAL. According to them, SERVPERF produced better results, more reliable estimations, greater convergent and discriminant validity, greater explained variance, and consequently less bias than the SERVQUAL. This instrument has also many applications in diversified areas such as higher education (Chi Cui *et al.*, 2003; Abdullah, 2006).

The main difference between the two frameworks is that in SERVQUAL measurement, perception minus expectation is the measure of service quality and if it is negative it indicates "dissatisfaction" and if positive it indicates "satisfaction," whereas, in SERVPERF perception alone is the measure of service quality (Rodrigues *et al.*, 2011).

However, despite SERVPERF's many merits, SERVQUAL still has the upper hand in terms of popularity and is considered the most commonly used measure around (Guo *et al.*, 2008; Ladhari, 2009). Among several instruments that have been proposed for measuring service quality, the SERVQUAL instrument (Parasuraman *et al.*, 1985, 1988, 1991, 1994) has received the most recognition.

*Criticisms of SERVQUAL.* There are decent amount of studies that have been devoted to criticize SERVQUAL such as Buttle (1996), Babakus and Boller (1992), Carman (1990), Carrillat *et al.* (2007), Ladhari (2009).

Throughout these critiques, a number of legitimate concerns emerged. These include but not limited to:

- (1) The concept of "expectations" has been criticized for being loosely defined and open to multiple interpretations (Teas, 1993).
- (2) Concerns have been raised regarding convergent validity, discriminant validity and predictive validity of the items and dimensions of SERVQUAL (Ladhari, 2009).
- (3) The dimensionality of SERVQUAL has also been an issue for a number of researchers (Carman, 1990; Cronin and Taylor, 1992; Teas, 1993; Buttle, 1996; Baker and Crompton, 2000). A number of researchers have suggested that

different dimensions are more appropriate for expectations, perceptions and gap scores (Ladhari, 2008). Carman (1990) and his findings in four settings (a dental school patient clinic, a business school placement center, a tire store and an acute care hospital) led him to conclude that the SERVQUAL dimensions are not generic. He further suggests that the number and type of dimensions could be different according to the services being evaluated. Ladhari (2008) called out for future studies to replicate these measures in different contexts to ascertain whether the number and nature of dimensions are applicable in other settings.

- (4) According to the two-dimensional model of Grönroos (1984), service quality consists of: technical (outcome) quality (which refers to the outcome of the service performance); and functional (process) quality (which refers to the manner in which the service is delivered). It has been argued that the SERVQUAL model is based on functional quality (the delivery process) rather than technical quality (the outcome of the service encounter). (Richard and Allaway, 1993; Brady and Cronin, 2001).
- (5) The applicability of SERVQUAL to different cultural contexts has been questioned (Ladhari, 2009).

From this, it is concluded that SERVQUAL may not be the ultimate instrument applicable across all different industries and contexts as there is no universal set of dimensions and items that determine the service quality across a section of service industries (Ramseook-Munhurrin and Nundlall, 2013). Therefore, there is a evident need for the development of context-specific service quality measurement scales. Many encourage adapting the SERVQUAL methodology to develop an instrument customized for a specific industry or specific study context (Ladhari, 2009).

### *2.3 Industry-specific service quality frameworks*

A particular finding is that context appears to play an important role, including both geographical and industry context (Lee, 2011).

It is interesting to note that there are many similarities between the dimensions used in SERVQUAL and those developed in alternative scales. This suggests that some service-quality dimensions are generic whereas others are specific to particular industries and contexts (Ladhari, 2008).

Although some studies did validate their proposed measurement scales, there remained concerns about generalizability. A generalization from a single study, no matter how large the sample, is always problematic. Future research is certainly needed to refine these scales (Ladhari, 2008).

As a consequence of the previously mentioned critiques, it has been demonstrated that a simple adaptation of the SERVQUAL model is infeasible to measure service quality across a diversity of service industries (Carman, 1990; Babakus and Boller, 1992; Brown *et al.*, 1993; Van Dyke *et al.*, 1997) and therefore, much of the emphasis in recent research has moved from attempts to adapt SERVQUAL to the development of alternative industry-specific measures (Ladhari, 2008).

In addition, Dabholkar *et al.* (1996) stated that a single measure of service quality across industries is not sufficient. Therefore, future research on service quality should involve the development of industry-specific measures of service quality. Indeed, ever since early 1990s, specific frameworks have been developed and tested to suite a particular industry and/or context. Saleh and Ryan (1991) developed a specific service

quality framework for the hospitality industry in Canada, Dabholkar *et al.* (1996) measured retail service quality in the USA, Vaughan and Shiu (2001) developed a framework for the voluntary sector in Scotland.

Despite the fact that SERVQUAL was utilized as a starting-point for the development framework dimensions (e.g. Dabholkar *et al.*, 1996; Frochot and Hughes, 2000; Sureshchandar *et al.*, 2002), there have been many studies that have attempted to develop their own service quality scale around the world from the West all the way to the Far East. For example, Lam and Zhang (1999) measured service quality in travel agencies in Hong Kong, Yoon and Suh (2004) measured consulting service quality in Korea and Sureshchandar *et al.* (2002) studied service quality in Indian banks.

Besides, a variety of service specific-industry quality models have emerged in all sorts of service industries, too. These have included (among others): restaurants (Stevens *et al.*, 1995); retail banks (Aldlaigan and Buttle, 2002; Sureshchandar *et al.*, 2002); career centers (Engelland *et al.*, 2000); internet retail (Janda *et al.*, 2002); hotels (Ekinci and Riley, 1998; Akbaba, 2006; Wilkins *et al.*, 2007); healthcare (Vandamme and Leunis, 1993; Tomes and Ng, 1995; Shemwell and Yavas, 1999; Sower *et al.*, 2001; Mosadeghrad, 2013); and higher education (Markovic, 2006; Sharabi, 2013).

To further advocate the idea of developing brand-new frameworks, several researchers have suggested that there is a need to develop culturally specific measures of service quality (Winsted, 1997; Raajpoot, 2004; Karatepe *et al.*, 2005). It has been contended that constructs of service quality that are developed in one culture might not be applicable in another (Kettinger *et al.*, 1995; Karatepe *et al.*, 2005).

#### 2.4 Service quality in education

Service quality has been explored in educational institutions in many studies (such as Ham and Hayduk, 2003; Angell *et al.*, 2008). However, it is further observed that most of these studies emphasized applying service quality models in higher education institutes (such as Rigotti and Pitt, 1992; Harrop and Douglas, 1996; Narasimhan, 1997; Lagrosen *et al.*, 2004; Abdullah, 2006; Barnes, 2007; Stodnick and Rogers, 2008; Shekarchizadeh *et al.*, 2011).

Recently, this customer-centric approach of service quality has gained momentum in educational literature (Stodnick and Rogers, 2008). It can be argued that the reason behind the majority of investigations using students' feedback to assess quality in higher education (Rowley, 1997; Aldridge and Rowley, 1998; LaBay and Comm, 2003; Barnes, 2007), and perhaps due to the high cost of tuition, the newer-generation students are seeing themselves more and more as customers and education institutes are beginning to adopt customer (student)-centric strategies (Stodnick and Rogers, 2008).

Thus competitive advantage, once a concept largely foreign to higher education, has become a driving force behind universities' success (Oldfield and Baron, 2000).

Student opinions hold such a critically important value to educational institutions since it has been reported that students' word-of-mouth recommendations play a large role in their decision to choose an academic institution and both university quality assurance and independent assessment evaluators place heavy emphasis on the student experience as one of their assessment criteria (Cuthbert, 1996a, b).

While some most recent studies have utilized SERVQUAL to measure student's perceptions and expectations (such as Shekarchizadeh *et al.*, 2011; Abili *et al.*, 2012), other studies were devoted to develop their own frameworks that are specifically designed to measure service quality in higher education. Though these studies worked on developing their own measurement framework, SERVQUAL was still an important

reference that the studies utilized in developing customized models. For example, Rigotti and Pitt (1992) also used a modified version of the SERVQUAL instrument, McElwee and Redman (1993) who developed QUALED to assess service quality in higher education by adopting SERVQUAL then adjusting accordingly to fit the education context, Hampton (1993) used a 45-item survey containing statements similar to those found in the SERVQUAL instrument and Hill (1995) also investigated the implications of service quality theory for higher education. Briefly addressing some quality dimensions, he focussed mainly on the application of a perception-expectation model in this context.

There is also a trend to develop service quality instruments to be applied in specific contexts in education. A good example might be Shekarchizadeh *et al.* (2011) who assessed the service quality perceptions and expectations of international postgraduate students studying in selected Malaysian universities. Vaughan and Woodruffe-Burton (2011) make another good example of context specific frameworks applied in education assessing SERVQUAL's ability in measuring disabled students' experience. Their study empirically tested a new disabled service user-specific service quality model ARCHSECRET against a modified SERVQUAL model in the context of disabled students within higher education where ARCHSECRET was found to be superior to the modified SERVQUAL in terms of its overall predictive power.

In addition to studies developing their own scale from scratch and others who have adopted SERVQUAL, others used the previously mentioned SERVPERF model as a base for developing a modified framework. Abdullah (2006), for example, proposed a performance-based measuring scale, the higher education performance only, based on that attempts to capture the authentic determinants of service quality within the higher education sector.

It is self-evident that service quality research in a secondary educational context is somewhat scant, and where investigations have been undertaken, very little has been concluded among educators' perspectives (Ramseook-Munhurrin *et al.*, 2010). Perhaps, the most relevant and recent study is one of Ramseook-Munhurrin *et al.* (2010) who proposed the EDUSERV model based on the modified SERVQUAL for the secondary school setting. Education service quality is much more than pedagogy, it is concerned with the physical, institutional and psychological aspects of education. It is therefore important to understand to what extent the service quality model could be adopted in the secondary school context. The aim of this study is therefore to propose a service quality measurement scale adjusted in the secondary education setting, based on perceptions of its main stakeholder groups, the educators.

Any framework specifically developed for measuring service quality in schools should be reflective of the values inherent in school education, be aligned with the broader functions of school education, recognize the complexity of schools as learning communities, be philosophically acceptable to school community members, be able to demonstrate a capacity for educational improvement, and provide a focus for school self-evaluation and external review (Berry *et al.*, 1988).

### 3. Theoretical framework

As observed in the literature review, the majority of research studies aiming at assessing service quality in education have mainly focussed their efforts on higher education institutions. The disregard of measuring service quality in primary and secondary education has resulted in a scarce pool of studies addressing service quality in school education settings. However, among the recent studies that have attempted to

fill this research void are Ramseook-Munhurrin *et al.* (2010). In their work, they utilized SERVQUAL as the foundation to develop their very own EDUSERV model customized for the secondary school setting. The five-factor model examined the relationship between service quality and overall satisfaction based on perceptions of – what was believed to be – the main stakeholder group; the educators.

Though this study commends Ramseook-Munhurrin *et al.* (2010) and Ramseook-Munhurrin and Nundlall's (2013) work and agrees that educators are among the important stakeholders of any educational institute, a disagreement emerges in regards to considering educators as the main stakeholders. The author begs to differ that students – along with their parents – are in fact the main stakeholders since students are the recipients of educational services, and with whom power lies to judge the quality of delivered services.

Where most investigations assessing quality of services of higher education institutes have taken into consideration students' perspective (Rowley, 1997; Aldridge and Rowley, 1998; LaBay and Comm, 2003; Barnes, 2007), this study, too, comes into play proposing a framework that captures the factors (dimensions) most significant to the main stakeholders – the recipients of educational services; the students. The difference is that this study proposes a framework in the secondary school setting.

### 3.1 *Determinants of service quality dimensions in the secondary education*

Similar to Ramseook-Munhurrin and Nundlall's (2013) work, a focus group session was held with specialists in the secondary education, with over 20 years of expertise in implementing international qualifications in Jordanian secondary schools. These experts come in contact with over 45 schools affiliated with the British elementary and secondary qualification programs in Jordan. In addition, the experts come in contact with students as managers of the international qualification examination sessions. Among the focus group session's members was the manager of British qualifications in Jordanian schools who offered valuable insight toward the dimension and sub-dimension selection discussion. The preference of selecting these experts over students and/or educators can be attributed to their expertise as well as them bringing a fresher more objective view of the most relevant and significant dimensions.

Since the dimensionality of SERVQUAL has caused quite a stir in literature, this study answers the call of the many studies that have called out for developing context-specific quality service frameworks. Keeping this in mind, and even though some items were modified to better fit the educational context, the original SERVQUAL's service quality dimensions have been preserved and were used as a basis for their analysis.

During the semi-structured focus group session, the experts were first asked to list the most important factors influencing students in private schools, especially students of international programs. After the initial listing of the factors, the author worked on aggregating relevant factors under one dimension. Six dimensions emerged as a result: facilities, competency, safety, management and leadership, reputation and cultural awareness.

Some of the dimension names were then refined to a more appropriate terminology to be more in tune to research terms. Safety, management and leadership and reputation were changed to health and safety, administration and image, respectively. The descriptions of each dimension are explained as follows.

*Facilities.* Concerns the tangible aspect of the school in terms of aesthetics. It also relates to hygiene, classroom set-up and capacity, laboratory set-up, modern apparatus

availability, school gymnasium and sport facilities, recreational facilities, school-uniform satisfaction as well as building and staff appearance.

*Competency.* Competency is essentially related to the knowledge of the academic staff (Owlia and Aspinwall, 1996). It focusses on teachers' competencies and qualifications in terms of experience, classroom management, English proficiency, and teaching and communication skills. Teachers' attitude also presents an important aspect. Their timeliness, willingness and readiness to solve students' problems and answer their questions remains important (Owlia and Aspinwall, 1996).

*Administration.* This dimension involves how students are treated by their school's administration in terms of individual care, problem solving, complaint handling, etc. In addition, it involves – to some degree – the school's flexibility. The degree to which staff are available to respond to students' enquiries can also be added under this category. Empathy and consistency are considered here as well.

*Health and safety.* Since most secondary school students are either 18 years of age or below, they are considered as under-aged and their well-being should be sought for in terms of the school's child protection policies. It relates to how safe students feel at school. It also includes having medical staff on school grounds, first-aid kits and having contingency plans in case of an emergency.

*Image.* The reputation and trustworthiness of an organization as perceived by the customers can be grouped into the image category of dimensions (Owlia and Aspinwall, 1996). This factor has to do with school reputation. Now, according to one of the specialists in the focus group session, this is a vital consideration to many students and parents when selecting a school. The image dimension also relates to the popularity of the school in terms of having a good name, the achievements of its alumni, its adoption of international qualification programs. While some studies have considered social responsibility as a stand-alone dimension such as Duggirala *et al.* (2008), social responsibility can, as well, fall under this dimension. An example could be what the school does for its disabled students.

*Cultural awareness.* Though this dimension has not been widely adopted in studies, it is seen as adequate to include since this is quite a sensitive topic in the MENA region, especially when it comes to the origin and ethnical aspects. It also pertains to the school's application of the equal opportunity and diversity concept in terms of treating students from all ethnical backgrounds and religious beliefs fairly. In Jordan, many students along with their parents get especially concerned when a particular school has his known to have certain religious beliefs. The concern manifests in fear of the school imposing its beliefs on students. On the contrary, some look for schools with a certain religious belief that is in harmony with the student and his/her family's own beliefs.

Listing the dimensions, it is clear that similarities to SERVQUAL are notably clear. They all relate to SRVQUAL in one way or the other. They especially relate to the ten initial dimensions of SERVQUAL in Parasuraman *et al.*'s (1985) earlier contributions. The most obvious similarity is the facilities dimension that correlates to tangibles in SERVQUAL. The second proposed dimension, competency, is also among SERVQUAL's framework in their initial work. Administration on the other hand, seems to encompass reliability and responsiveness dimensions mentioned in the modified SERVQUAL. The fourth dimension of this study is health and safety. This could be seen as related to a former dimension of SERVQUAL's; security. Now, image, in a way, can be seen as related to credibility of SERVQUAL'S initial pool of dimensions. Finally, cultural awareness can be seen to correlate with empathy.

### 3.2 The proposed conceptual framework

Table I below lists the proposed framework's dimensions along with a definition of each one.

### 3.3 The questionnaire

Unlike some studies that developed an initial pool of scale statements from a review of literature (e.g. Mentzer *et al.*, 1999; Khan, 2003; Wilkins *et al.*, 2007), this study has generated the statements during the focus group session. After determining the six dimensions, under each dimension a number of items were developed to be included in the questionnaire. The elements were then refined to more appropriate layman terminology to be more straight forward and comprehensible to the respondents. The questionnaire was thus developed and is presented in the Appendix.

Preserving the originality of the SERVQUAL model, which the resultant multi-dimensional proposed framework is founded on, this study's model is intended to measure both student perceptions and expectations, i.e., the gap model. However, dissimilar to SERVQUAL, this study's framework encourages collecting student perceptions and expectations simultaneously for ease of measurement. However, the study realizes the importance of respondents rating perceptions first, therefore, the questionnaire is designed in a manner that allows respondents to rate perceptions first and expectations second. This sequence is important to enable respondents to assess faculty office services without consciously assessing expectations first (Galloway, 1998).

Though most studies have used a seven-point Likert scale, here a five-point Likert-type scale is used, instead (labeled as 1 – strongly disagree, 2 – disagree, 3 – neither disagree nor agree (neutral), 4 – agree and 5 – strongly agree). The justification for this is that psychometric research has shown that most subjects cannot reliably distinguish more than six or seven levels of response, and thus using a five-point Likert scale would reduce the so-called "frustration level" of respondents and increase response rate and quality (Babakus and Mangold, 1992). This is further advocated since students are the respondents of the questionnaire so maintaining simplicity is highly recommended to stimulate cooperation. Furthermore, Lewis (1990) criticized the use of a seven-point Likert scale for its lack of verbal labeling for points two to six, which may cause respondents to overuse the extreme ends of the scale. Scale point proliferation has come across as impractical as it takes some thought and effort.

Dimension	Definition in secondary education
Facilities	Students' perception of quality with regard to the physical facilities in the school; the extent to which the school is clean, well-equipped, etc.
Competency Administration	Relates to teachers' perceived skills, qualifications, empathy and courtesy Relates to the school's perceived reliability, responsiveness and competency in terms of administration
Health and safety	The degree to which students feel safe and secure at school. This relates to school's reliability, problem solving and emergency-handling among other things
Image	The extent to which the school has a reputable name with positive word-of-mouth feedback
Cultural awareness	How sensitive the school is in terms of religious, cultural and political beliefs, as well as the extent of school application of equal opportunity and diversity concept concepts

**Table I.**  
Proposed conceptual  
framework

During the construction of the questionnaire, a few points were taken into consideration. First, in order to reduce the tendency to mark every item at the same end of the scale is to reframe some sentences into negative (non-affirmative) wording. By offering positive and negative responses the respondent is required to evaluate each response rather than uniformly agreeing or disagreeing to all of the responses (Frery, 1996). Second, peripheral questions and ones to find out “something that might just be nice to know” must be avoided (Frery, 1996) and so they were, since long questionnaires often with many questions may result in annoyance and frustration for many responders.

The resultant questionnaire consists of 30 parallel statements that represent the six-service quality dimensions. The respondents are expected to respond to each statement by first stating their answer in the “perception” column, then stating what they expect of the school in terms of the service mentioned in the sentence in the second “expectation” column.

### 3.4 *The proposed quantitative stage*

Developing the conceptual framework of this study is considered to be a stepping stone to explore the reliability and validity of the model. The sample sizes in the literature review for collecting quantitative data to measure a framework’s validity has varied from 70 (Vandamme and Leunis, 1993) to 5,531 (Mentzer *et al.*, 1999). However, for sufficient data, this study recommends a sample size of over 200 respondents.

After collecting the required data from the questionnaire distribution, item-to-total correlation analysis (i.e. correlation between the score on an item and the sum of the scores of all other items constituting a single factor) is conducted to filter out unnecessary items from the framework. This “purification” that Parasuraman *et al.* (1988) in their study is conducted to verify construct validity before the analysis is conducted. Items with low item-to-total correlations (less than 0.40) are eliminated without altering the original framework’s structure (Hair *et al.*, 1995). This deletion is to improve the model’s reliability by increasing the Cronbach’s  $\alpha$  (Ramseok-Munhurrund and Nundlall, 2013). It is worth mentioning this study advocates using item-to-total correlation analysis over using loading scores since it was the most used methodology as a basis for item exclusion (Ladhari, 2008).

Reliability is usually then tested by measuring Cronbach’s  $\alpha$ . It was concluded in Ladhari’s (2008) work that it is the most commonly used measure of scale reliability (i.e. the internal homogeneity of a set of items composing a scale). A score of greater than 0.60 yields good reliability.

In addition to measuring construct validity, other types of validity are usually explored in service quality studies. For example, discriminant validity (i.e. the extent to which measures of theoretically unrelated constructs do not correlate with one another) and predictive validity (i.e. the extent to which the scores of one construct were empirically related to the scores of other conceptually related constructs). However, according to Ladhari (2008), only a few studies tested and supported all types of validity.

To assess the mentioned reliability and validity of the frameworks, in most studies, either an exploratory factor analysis or a confirmatory factor analysis (CFA) is conducted. However, though the CFA is more widely employed, Ladhari’s (2008) sees these two approaches complementing each other and, hence, suggests combining them to provide a better quantitative perspective.

As a significant suggested research opportunity for the proposed quantitative stage of this research, we also suggest to adopt one of the multiple criteria decision making techniques in order to evaluate and prioritize the six identified dimensions in Table I. In this regard, the systematic approach of analytic hierarchy process method is highly recommended.

#### 4. Conclusion and implications

Answering to the many calls for developing industry-specific service quality frameworks and following the footsteps of the SERVQUAL model, a multi-dimensional model resulted. The model includes six dimensions that resulted from an in-depth focus group session with field experts. Under each dimension, a number of elements emerged and were translated into simpler layman terminology to further stimulate cooperation from respondents (i.e. students).

Since knowing what customers expect is the first, and possibly most critical, step in delivering service quality (Zeithaml *et al.*, 1990), the developed model is designed to capture both perceptions and expectations. This gap analysis (perceptions minus expectations) is prevalent among service quality research and has been widely applied across many industries and hence, it is applied here as well.

Because of the paradigm shift and structural reforms educational institutes – not least schools – have been witnessing, and with the increasingly high cost of education, students are looked upon as customers rather than students. Therefore, they are entitled to judge their schools' (or educational institute) performance. In fact, no one except them has experienced the schools' services first hand. Consequently, schools, in their endeavor to better the quality of their education especially in such a competitive era, should pay close attention to what the students have to say.

Utilizing such a framework to measure the gap between students' perceptions and expectations are of paramount importance not only to measure the school's overall shortcomings, but also analysis can pinpoint the exact location. Thus, a school's strengths and weaknesses can be concluded and analyzed opening up discussions about potential sources and then possibly develop action plans. After all, this is the essence of total quality management.

Along similar lines, schools can also utilize this framework as a self-measuring tool to monitor their progress by comparing the gap results of their school at different points in time.

This is some of the managerial implications that this study has to offer. However, having designed this framework to suit students in Jordanian private schools who are enrolled in international programs, other researchers are encouraged to test the framework in other similar contexts to see how it will the measure will hold.

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## Appendix

The resultant questionnaire consists of 30 parallel statements that represent the six service quality dimensions. The respondents are expected to respond to each statement by first stating their answer in the "perception" column, then stating what they expect of the school in terms of the service mentioned in the sentence in the second "expectation" column.

### *Facilities*

- Your school has clean modern facilities.
- Your school's classrooms are well set-up with enough space for students.
- Your school has modern laboratory facilities and equipment.
- The bathrooms at your school are clean with enough hygiene solutions (soap, tissue paper, etc.).
- Your school uniform is well- designed, fashionable and fits you well.
- You have nice open-space areas with recreational facilities at your school (garden, fountain, etc.).
- Your school has a good Gymnasium and other sport facilities and equipment.

### *Competency*

- Teachers at your school speak English well.
- Teachers at your school have good teaching experience.
- Teacher at your school can manage the classroom well.
- Teachers at your school are pleasant with positive attitudes.
- Teachers are unwilling to help you out when you need them.
- Teachers are willing to help you out when you need them.
- Teachers answer student's' questions pleasantly.

### *Administration*

- The school administration staff (Principal, coordinator, assistant coordinator, etc.) give you individual care when you have an enquiry/problem.
- The school are available to respond to your questions and enquiries.
- Your school takes your feedback and complaints seriously and does something about them.
- Administration staff at your school are pleasant with positive attitudes.
- Administration staff are unwilling to help you out when you need them.

### *Health and safety*

- You feel safe at your school.
- There are medical staff (school nurse, medical professional, etc.) available at the school.
- Your school has emergency plans in case of emergencies.

*Image*

- Your school has a good reputation and is viewed as trustworthy.
- Your school has a good name for its international qualifications.
- Your school does much charity work to benefit society (environmental and social work).
- Graduates of your school are well-accomplished and have succeeded after graduating.

*Cultural awareness*

- Your school respects all students from different nationalities and ethnic groups.
- Your school respects all religious beliefs and treats everyone equally.
- Your school tries to impose their religious beliefs on their students.
- Your school makes special consideration and arrangement for students with special needs.

**Corresponding author**

Rateb J. Sweis can be contacted at: [rateb.sweis@gmail.com](mailto:rateb.sweis@gmail.com)