

# WHAT FORMS UNIVERSITY IMAGE? AN INTEGRATED MODEL FROM SYRIA

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**Abstract.** This study aims at developing and empirically testing an integrated model incorporating the factors that form university image in Syria. The study used a quantitative survey of students at Syrian universities. A pre-test of the questionnaire was undertaken using a convenient sample of 40 students. Thereafter, a sample of 259 students was used to test the model using structural equation modeling. The findings suggest word of mouth and faculty-individualized attention, one of service quality dimensions, as the antecedents of university image. Moreover, the findings reveal a positive effect of faculty-individualized attention and support staff helpfulness, as service quality dimensions, on student satisfaction. It is also found that student satisfaction positively affect word of mouth. This study is expected to help Syrian universities understand the key factors contributing to university image formation, and, therefore, strengthen their positions in the market. This study comes to be one of the first studies that attempt to understand how university image is formed.

Keywords: service quality, student satisfaction, word of mouth, university image, higher education, Syria.

JEL Classification: M31.

## Introduction

In the last decade, the higher education market in Syria has experienced quite dramatic growth. For many years, higher education in Syria had been solely provided by the government for very limited student fees. However, the increasing demand and the arising cost of higher education posed a considerable challenge for the government to meet higher education demands, either at the quantitative or at the qualitative level. As a result, the government was encouraged to allow opening private fee-paying universities, which took place in 2001.

Since 2001, due to the new legislative reform that governs the work of private universities, competition in the Syrian higher education market became more apparent in both public and private sectors, and for the first time, the concept of student as 'customer' became much more popular in the higher education sector (Ayoubi *et al.* 2011). By the end of 2013, six public universities, seventeen private universities, four public higher institutes, and one private higher institute were operating in the market of higher education in Syria, seven times exceeding the number of universities in 2001, only four public universities. The sudden increase in the number of universities led to intensive competition in the market, with each university struggling to locate and maintain its position in the market (Al-Fattal 2010).

In the scene of such competition, university image is considered to be a valuable asset (Kotler, Fox 1995; Stensaker 2007). Stensaker (2007) hold that the image a higher education institution has in its surrounding seems to be considered as more important than before, and, to an increasing extent, a strategic and managerial issue. Kotler, Fox (1995), furthermore, stated that an institution's current image is even more important than quality because it is the perceived image that actually influences choices made by

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prospective students. It influences student willingness to apply for enrolment (Landrum *et al.* 1998), student satisfaction (Alves, Raposo 2010; Clemes *et al.* 2013), and student loyalty (Alves, Raposo 2010). Realizing this, Syrian universities need to understand, empirically, how their images are shaped and consequently can manage their promotional communications in a more effective balance.

However, the literature on factors contributing to the formation of university image is still scarce in concerning the Syrian higher education system. Therefore, this study aims at developing and empirically testing an integrated model which will contribute to our understanding of university image formation in the Syrian context. Service quality, student satisfaction, and word of mouth are undertaken in the model as antecedents of university image as suggested by the previous researches that were conducted in other contexts (e.g., Alves, Raposo 2010). With respect to the factorial shape of SERVPERF instrument that was validated by Mahmoud, Khalifa (2015) within the Syrian higher education system, our study is novel to be one of the first empirical investigations that take into account the new dimensions of service quality when it comes to explain the formation of university image.

The following sections discuss a review of relevant literature, research methods, results, discussion and implications.

#### 1. Literature review

### 1.1. Service quality

There is a broad consensus that a generic definition of service quality is difficult to develop due to the four unique characteristics of service, namely, intangibility, inseparability, heterogeneity, and perishability (Parasuraman 1986). As such, service quality has been defined as the customer attitude of overall judgment about service superiority, based on the assessment of the customer, and not on a physical item (Arnould et al. 2002; Coulthard 2004; Pakdil, Aydin 2007; Parasuraman et al. 1988; Zammuto et al. 1996; Zeithaml 1987). In the context of higher education, different groups of customers are recognized, for example, students, government, and employers, resulting in different perceptions of service quality. However, being the primary participants and payers for the service, students are largely treated as the primary customers (Brochado 2009; Marzo-Navarro et al. 2005; Voss et al. 2007). Consequently, many researchers have defined service quality from the perspective of students. For O'Neill, Palmer (2004: 42), service quality in higher education is "the difference between what a student expects to receive and his/her perceptions of actual delivery".

Another debate in the service quality literature is over how to best measure service quality. Among the different models of measuring service quality, the SERVQUAL instrument (Parasuraman *et al.* 1985), also known as deficiencies model, has gained much attention in all industries, including higher education (Abu Hasan et al. 2008; Atrek, Bayraktaroglu 2012; Calvo-Porral et al. 2013; Dado et al. 2012; Gallifa, Batalle 2010; Ibrahim et al. 2013; Stodnick, Rogers 2008). However, the criticism towards the instrument, targeting mainly the dimensional instability (Cronin, Taylor 1992; Finn, Lamb 1991; Parasuraman et al. 1985) and the adoption of expectations in the measurement, which are dynamic in nature (Adil et al. 2013; Cronin, Taylor 1992; Gallifa, Batalle 2010; Teas 1994), triggered the need for alternative instruments. Cronin, Taylor (1992) introduced the SERVPERF instrument, based only on perceptions. Several researchers in higher education (Abdullah 2005; Brochado 2009; Law 2013; Sultan, Wong 2012) chose SERVPERF, claiming that SERVPERF presents a better measurement against SERVQUAL in this context.

However, keeping in mind that the determinants of higher education service quality vary widely in the context of culture (Mai 2005; Sultan, Wong 2012), Mahmoud, Khalifa (2015) suggested an adapted three-factor SERVPERF instrument based on a sample of students from Syrian universities. The instrument consists of the three dimensions: faculty-individualized attention, support staff helpfulness, and support staff empathy. Firstly, faculty-individualized attention implies the degree to which faculty members understand students' specific needs and care about them. Secondly, support staff helpfulness indicates the ability and willingness of support staff to serve students. Finally, support staff empathy refers to the care and the individualized attention provided to students by support staff. Since our study is conducted in the Syrian higher education sector, we adopted Mahmoud, Khalifa's (2015) instrument for the service quality construct.

### 1.2. Student satisfaction

The literature of customer satisfaction has introduced numerous definitions, e.g. "a person's feelings of pleasure or disappointment resulting from a consumption experience when comparing a product's perceived performance or outcome in relation to his or her expectations" (Lovelock, Wirtz 2007: 631) and "a cognitive or affective reaction that emerges in response to a single or prolonged set of service encounters" (McDougall, Levesque 2000; cited in Wei, Ramalu 2011: 3). The development of a single, global definition of customer satisfaction has been hindered by the nature of the concept, which is active and dynamic, with a strong social dimension, which is context-dependent and invariably intertwined with life satisfaction and the quality of life itself (Fournier, Mick 1999). As such, Giese, Cote (2000) suggested developing specific definitions, which are adapted to different research contexts and are conceptually richer and empirically more useful than previous definitions. On adaptation to the context of higher education,

Elliott, Shin (2002: 198) defined student satisfaction as "the favorability of a student's subjective evaluation of the various outcomes and experiences associated with education. Student satisfaction is being shaped continually by repeated experiences in campus life".

The relationship between satisfaction and service quality occupies a central position in the higher education marketing literature. Several studies pointed out that service quality has a vital role in determining the level of students' satisfaction (Clemes *et al.* 2013; Dado *et al.* 2012; Gruber *et al.* 2010; Kuo, Ye 2009; Sultan, Wong, 2013; Teo, Soutar 2012; Wei, Ramalu 2011). Based on the above discussion, the authors hypothesized the following hypotheses.

H1. Faculty-individualized attention will have a positive and significant effect on student satisfaction.

H2. Support staff helpfulness will have a positive and significant effect on student satisfaction.

H3. Support staff empathy will have a positive and significant effect on student satisfaction.

## 1.3. Word of mouth

Word of mouth has been described as the process of exchanging information or opinions regarding brands, products, services, or institutions without commercial intention (Chen et al. 2013; Kuo et al. 2013) and it is regarded as direct motive for brand selection (Uncles et al. 2010) that shapes decision choice (Mitsis, Foley 2012). It can be exchanged through face to face or other communication channels throughout social networks (Kuo et al. 2013). Word of mouth could imply positive or negative consumers' experiences directing other customers toward or away from specific brands, products, services, or institutions (Hawkins et al. 2004; Soderlund, Rosengren 2007). Since the communicators are independent of the market, word of mouth is considered more trustworthy and persuasive than institution-led marketing communications (Chen et al. 2013).

Literature showed that word of mouth results from customer satisfaction. That is, a high level of satisfaction leads the satisfied customer to spread positive word-of-mouth advertising about the product or the company (Carpenter, Fairhust 2005; Singh, Pandya 1991; Teo, Soutar 2012). Moreover, Teo, Soutar (2012) revealed that student satisfaction in higher education raises the frequency with which a student engages in word of mouth, the number of people with whom the student engages, and the valence of the word-of-mouth comments the student makes about his experiences. Hence, the authors hypothesized the following hypothesis.

H4. Student satisfaction will have a positive and significant effect on word of mouth.

#### 1.4. University image

In general terms, institution image has been defined as the sum of individual's perceptions or impressions of an institution's products, services, management style, communication efforts, and global activities (Chun 2005; Lai et al. 2009; Lovelock, Wirtz 2007; Marken 1990; Souiden et al. 2006). In line with this, Arpan et al. (2003) defined university image as the sum of all the beliefs an individual has towards the university. These beliefs can be formed through experiences with the institution along with information received about it. This is processed either directly or through mediators like the media or other people (Kantanen 2012). Therefore, the perceptions of service quality added to the activities of word of mouth seem to be the main predictors of institution image. Positive image is likely to represent a key success factor when it comes to the survival of higher education institutes (Mackelo 2009 in Druteikiene 2011; Feldman et al. 2014; Radomir et al. 2014; Raithel et al. 2010; Walker 2010; Eberl 2010). Thus, many authors have referred to favorable university image as a source of competitive advantages (e.g., Druteikiene 2011) and a strategic approach to positioning in the higher education sector (Szwacka-Mokrzycka, Abutalibov 2014).

Several researchers indicated the significant effect of service quality in the formation of the institution image (Cheng *et al.* 2008; Clemes *et al.* 2013; Lai *et al.* 2009). Clemes *et al.* (2013) suggested that a university's image is enhanced when students perceive that they receive a higher level of service quality. Based on the above discussion and on Mahmoud, Khalifa (2015), the authors hypothesized the following hypotheses.

H5. Faculty-individualized attention will have a positive and significant effect on university image.

H6. Support staff helpfulness will have a positive and significant effect on university image.

*H7.* Support staff empathy will have a positive and significant effect on university image.

In addition to service quality, word of mouth represents another effective factor influencing institution image (Barreda, Bilgihan 2013; Jansen *et al.* 2009; Jalilvand, Samiei 2012; Mason 2008). Jalilvand, Samiei (2012) claimed that word-of-mouth effects are becoming more important due to increasing improvements in, and spread of, network technology. That is, each piece of information, even inaccurate (Kotler, Fox 1995), and activity, even small and relatively unimportant (Mason 2008), could escalate through word of mouth to create the perceptions toward institution image. Regarding the context of higher education, the authors are not aware of any studies that investigate the relationship. However, based on the above discussion, the authors hypothesized the following hypothesis. H8. Word of Mouth will have a positive and significant effect on university image.

The above hypotheses suggested a model having six latent constructs and eight relationships (Fig. 1). The model was examined in the subsequent sections.

### 2. Methodology

#### 2.1. Questionnaire design

To investigate the hypotheses of the study, the questionnaire was adopted as the survey instrument including all the constructs in the proposed model. The questionnaire consists of two parts. The first part presents students' profiles (i.e. gender, age, and university type). The second part of the questionnaire deals with the measurement of the constructs of the study. As mentioned earlier, Mahmoud, Khalifa's (2015) instrument was deployed as an adapted and validated service quality instrument, developed in the context of Syrian higher education. Student satisfaction and university image were drawn from Alves, Raposo (2010). Word of mouth was adopted from Teo, Soutar (2012). All the items were measured using a five-point Likert-type scale. As all of these scales were obtainable in English language, an expert translator translated the questionnaire from English to Arabic. Then, the resulting translation was, blindly, back-translated from Arabic to English by another translator. After that, the authors matched the translated copies to reach the most accurate translation and eliminate statements that gave different meanings. The new copy was then reviewed by academicians from the Faculty of Business Administration, Arab International University to guarantee face validity (Tharenou et al. 2007). Items were rated on 5-point Likert scale (1 = strongly disagree and 5 = strongly agree). SPSS-AMOS v. 21 was used to test the path model.

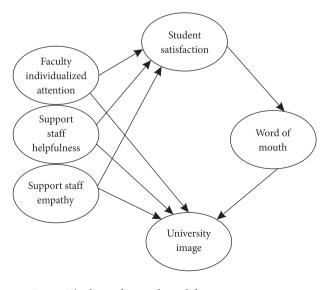


Fig. 1. The hypothesized model

## 2.2. Data collection

This study took place in the Syrian higher education institutes. A pre-test of the questionnaire was undertaken using a convenient sample of 40 students with similar backgrounds to those questioned during the main survey. The authors, subsequently, became sure of students' understanding of the questionnaire items and were ready for the main survey. The finally used scales are shown in Appendix. Using a convenience sampling method, the authors distributed 1500 self-administrated questionnaires to students from public and private universities in Syria. This data collection process yielded back with 259 valid responses that were used in the statistical analysis. Respondents' profiles are presented in Table 1.

Variable	Frequency	%
Gender		
Male	157	52.00
Female	145	48.00
Age		
<20	16	5.29
20 to <22	120	39.74
22 and >22	166	54.97
University type		
Public	142	47.00
Private	160	53.00

Table 1. Students' profile

## 3. Results

### 3.1. The measurement model

In this study, two tests were used to assess the measurement properties of each construct. First, alpha Cronbach test was performed to assess internal reliability, returning alpha Cronbach values that satisfied the minimum of 0.7 suggested by Tharenou *et al.* (2007). Second, average variance extracted (AVE) values were used to assess convergent validity. Each construct had an AVE value that exceeded the minimum of 0.5 suggested by Fornell, Larker (1981) (Table 2).

Table 2. Internal properties of the assessed measures

Construct	Composite reliability	Average variance extracted (AVE)	
Faculty-individualized attention	0.87	0.61	
Support staff helpfulness	0.92	0.77	
Support staff empathy	0.95	0.86	
Student satisfaction	0.93	0.75	
Word of mouth	0.88	0.81	
University image	0.87	0.66	

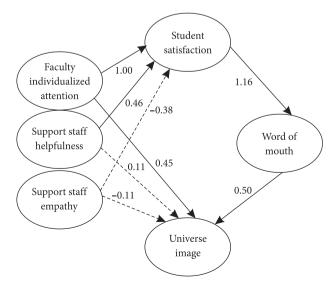
Thereafter, the measurement model was assessed prior to estimating the structural model (Gerbing, Anderson 1988). The overall model was  $x^2 = 728.68$ , df = 284, and p = 0.000. The measurement model's fit was assessed using the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the root mean square error of approximation (RMSEA). The fit indices were all in acceptable ranges. The CFI and the TLI values were 0.93 and 0.92, respectively, satisfying the minimum of 0.90 suggested by Hu, Bentler (1999). The RMSEA value was 0.07, satisfying the maximum of 0.08 suggested by Hu, Bentler (1999).

#### 3.2. The structural model

The structural model was considered to have a good fit between the hypothesized model and the observed data. The overall model was  $x^2 = 734.77$ , df = 290, and p < 0.0001. The fit indices revealed the good fit to the data. The CFI was 0.93, the TLI was 0.92, and the RMSEA was 0.07, respectively, all of which were in the acceptable ranges suggested by Hu, Bentler (1999). Figure 2 displayed all of the structural relationships among the studied constructs, path coefficients, and their significance. As exhibited in Figure 2, the results came to support H1, H2, H4, H5, and H8. However, H3, H6, and H7 were not supported by the data.

### 4. Discussion

This study aims at developing and empirically testing an integrated model incorporating the factors contributing to university image formation in the Syrian higher education context. Service quality, student satisfaction, and word of mouth are undertaken in the model as antecedents of university image. Scales for the respective constructs are validated in respect to the Syrian context. The proposed model



*Note:* Dashed lines indicate insignificant paths at 0.001 Fig. 2. Path model

is tested using SEM, and the results show a good fitting of the proposed model to data collected for the present study.

Results for the present study come to partially confirm the positive effect of service quality on student satisfaction, which was suggested by previous research (Clemes et al. 2013; Dado et al. 2012; Gruber et al. 2010; Kuo, Ye 2009; Sultan, Wong 2013; Teo, Soutar 2012; Wei, Ramalu 2011). In other words, results reveal a positive effect of facultyindividualized attention, the first service quality dimension, on student satisfaction,  $\beta = 1.00$ , p < 0.001. That is, students having more understanding and caring from faculty members are more satisfied with their universities. Results also prove a positive effect of support staff helpfulness, the second service quality dimension, on student satisfaction,  $\beta = 0.46$ , p < 0.001. This reflects the fact that offering timely and willing help by support staff can enhance the satisfaction of students. However, no significant effect was found for support staff empathy on student satisfaction,  $\beta = -0.38$ , p > 0.001. As such, we recommend Syrian universities' administrators to pay close attention to their staff, academic and administrative. We argue that offering appropriate and stimulating work environments will increase the levels of their performance, and, therefore, increase student satisfaction.

It is also found that the impact of service quality on university image (Cheng *et al.* 2008; Clemes *et al.* 2013; Lai *et al.* 2009) is partially supported. Only one service quality dimension, faculty-individualized attention, predict university image,  $\beta = 0.45$ , p < 0.001. As such, we can say that the more the faculty members understand students' specific needs and care about them, the better become their beliefs towards their universities. However, the other dimensions of service quality, support staff helpfulness and support staff empathy have no direct significant impact on university image,  $\beta = 0.11$ , p > 0.001, and  $\beta = -0.11$ , p > 0.001, respectively. The result again stresses the need for universities' administrators to care about academic staff members due to their significant role in the formation process of university image.

Consistent with previous research (Carpenter, Fairhust 2005; Singh, Pandya 1991; Teo, Soutar 2012), it is found that student satisfaction positively affect word of mouth,  $\beta = 1.16$ , p < 0.001. That is, happy and satisfied students tend to share their feelings about their universities with their colleagues. Additionally, and in line with previous research (Barreda, Bilgiham 2013; Jansen *et al.* 2009; Jalilvand, Samiei 2012; Mason 2008), word of mouth found to positively affect university image,  $\beta = 0.50$ , p < 0.001. It is worth noting that in the Syrian higher education scene, word of mouth is proved to be the most important factor in the formation of university image. The authors attribute the result to the fact that formal university rankings are lacked in the Syrian higher education. We also argue that the ample

spread of electronic social networks stresses the importance of word-of-mouth communications. As the concern of our study was directed towards positive word of mouth, we can say that students recommending and positively talking to each other about their universities can enhance the image of their universities in the eyes of their colleagues. The result suggests that university marketers should wisely manage word-of-mouth communications in order to take full advantage of it. For the most part, marketers should assure students satisfaction through taking continuous evaluations from students regarding the quality of services encountered. The experiences of satisfied students should, consequently, be spread by marketers through social networks and public events.

Besides the above-mentioned-direct effects, indirect effects are examined in this study. It is found that both student satisfaction and word of mouth partially mediate the relationship between service quality and university image, p < 0.001. Furthermore, word of mouth fully mediates the relationship between student satisfaction and university image, p < 0.001 (Table 3).

Table 3. Mediation effect confirmation - indirect effects'	
coefficients	

	Effect on $\rightarrow$		
Effect of $\downarrow$	Student satisfaction	Word of mouth	University image
Faculty-individua- lized attention		1.16**	0.58**
Support staff helpfulness		0.54**	
Support staff empathy			
Student satisfaction			0.59**

Note: \*\* Effect is significant at the level 0.001

This study contributes to our understanding of how university image is formed within the Syrian context. Having a greater understanding of the factors that students reported as the most important contributors of university image formation is expected to help universities address these factors, improve their images, and, therefore, strengthen their positions in the market. Additionally, our research comes to be the first on investigating the relationship between perceived quality and university image concerning the new SERVPERF dimensionality developed by Mahmoud, Khalifa (2015).

## Conclusion

In conclusion, to succeed in developing a favorable university image in Syria, university administrators need to invest time and effort to wisely manage word of mouth as well as maintain faculty-individualized attention. University administrators should ensure the spread of positive word of mouth through satisfying their students, which are informal marketers for their universities, and spread their experiences. Based on our findings, students are more satisfied when obtaining individualized attention from faculties and help from administrative staff. In the process, training on teaching skills should be provided to faculty members to enable them handle students' diverse learning levels as well as cognitive and emotional different capabilities. Moreover, a parallel training on technical and communication skills should be offered to administrative staff. Both staff types, academic and administrative, should also have appropriate and stimulating work environments, which will increase the levels of their relations with students. Furthermore, university administrators need to keep appropriate student/staff ratios, enabling the individualized attention from faculty members. The experiences of satisfied students should, thereafter, be spread by marketers through social networks and public events, especially the dominant online ones. In the process, the authors also recommend monitoring and analyzing students comments raised via these platforms in order for a better understanding of students' needs and expectations that drive satisfaction or dissatisfaction, which in turn must result in more focus on the areas raised by students, more positive word of mouth, and accordingly, more favorable university image.

#### Limitations and suggestions for future research

Like any other empirical investigation, this study has some limitations that should be addressed in future research inspections. First of all, this study is conducted based on a sample of students at Syrian universities. Therefore, generalizations to universities in other cultural contexts should be done with caution. Second, the study focuses on marketing factors, service quality, student satisfaction, and word of mouth, to investigate their impact on university image. Therefore, future studies could investigate other factors, for example, the employability of universities' graduates and the level of research conducted at these universities. Third, with taking some moderating variables (e.g., demographics) into the relationships among our constructs, future researches can draw clearer view on our model and about any potential invariances. Eventually, looking at crisis blowing Syria since 2011, wartime perceptions have appeared in some scholarly works as precursors of some attitudinal constructs (e.g., Mahmoud et al. 2015; Reisel, Mahmoud 2014). In this respect, wartime perception is highly recommended to be included in future investigations on university image in the Syrian context, as all business sectors in Syria seem to, in a way or another, be affected by the crisis.

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# APPENDIX

The items used to measure the model's constructs

The items used to measure the moders constructs	
Faculty-individualized attention	Word of mouth
Faculty maintained error free records	I am proud to tell others I study at this university
Faculty behavior instilled confidence in you	I often recommend this university to others
Faculty gave you individual attention	In general, I speak favorably about this university
Faculty had your best interests at heart	
Faculty understood your specific needs	University image
	In general I think this is a good university to study
Support staff helpfulness	This is an innovating university and turned to future
Support staff provided services at time promised	This is a university with a good academic reputation
Support staff performed service right first time	This is a university that gives students a good preparation
Staff willing to help	This is a university very involved with community
Support staff respond to request all the time	
Support staff empathy	
Support staff gave you individual attention	
Staff had your best interest at heart	
Support staff understood your specific needs	
Satisfaction	
Considering the global experience I have had with this university, which is your level of satisfaction?	
To what level this university has corresponded to your expectations?	
To which point this university has corresponded to your wishes/needs?	
I think my university is perfect	
I made a good decision when I chose this university	
Which is your level of happiness for having chosen this university?	

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