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When empathy hurts: Modeling university students' word of mouth behavior in public vs. private universities in Syria

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SCHOLARONE™ Manuscripts When empathy hurts: Modeling university students' word of mouth behavior in public vs.

private universities in Syria

Abstract

This study examines and compares word of mouth (WOM) behavior among university students in Syria in relation to their perceived satisfaction with their tertiary education provider. To date, no research has examined this important phenomenon which is surprising given the deregulated education market in Syria that allows for private universities to compete for students alongside public universities. Using a mixed methods research design and structural equation modelling, our results show faculty individualized attention and student satisfaction were found to be positively related to university image. Further, student satisfaction and university image were found to be direct sources of positive student's word-of-mouth behavior. We found a moderating effect of university ownership type on university image. Interestingly, we identified six themes showing how support staff empathy could be seen as a source of low student satisfaction, namely, deception/credibility/soft-soapers/suspiciousness, confusion/role conflict, unfairness, privacy, self-congratulatory, and support staff/student ratio. The insights presented in this study have both theoretical implications for future scholarly work and practical implications for university administrators who are seeking to understand important factors that affect university students WOM behavior.

Keywords: Service quality; student satisfaction; university image; word of mouth

1.0 Introduction

Students have long been respondents in academic research. Their perceptions have been sought by scholars on a variety of academic and educational studies. For instance, students have been respondents in studies on *peer assessment* (Wen & Tsai, 2006), marketing of education (Binsardi & Ekwulugo, 2003), *cooperative learning methods* (Phipps, Phipps, Kask, & Higgins, 2001), *learning environments* and their *academic outcomes* (Lizzio, Wilson & Simons, 2002), *elearning* (Keller & Cernerud, 2002), *the use of Facebook as a learning tool* (Irwin, Ball, Desbrow, & Leveritt, 2012), *learning in small groups* (Hillyard, Gillespie, and Littig, et al 2010), and *course selection criteria* (Cubillo, Sanchez, & Cervino, 2006).

The Syrian higher education market has experienced phenomenal growth in the past decade (Mahmoud and Khalifa, 2015). University places for students in Syria are funded by the national government, however, due to the increasing demand for university places and the increasing cost of higher education, the Syrian government deregulated the higher education market in 2001 to allow for fee-paying private universities to establish their operations in Syria. Since deregulation, 20 private universities and institutions of higher learning commenced operations in Syria, alongside seven public universities and four public higher learning institutions. (Syrian Ministry of Higher Education, 2016). These sweeping reforms in the Syrian tertiary education market provided students with greater choice of education provider, ushering in the notion of 'students as customers' (Pitman, 2016). Consequently, universities in Syria face increasing competition for student enrolments whilst competing to maintain a position in the market, in the backdrop of a declining number of student enrollments during the civil war (Mahmoud and Khalifa, 2015). In 2016 the total number of students enrolled in Syrian private universities had decreased to thirty thousand with an average tuition fee equal to USD 2,863 per

annum. These enrollments represent only three percent of the total students enrolled in Syrian public universities. Most of Syria's private university students are either sons or daughters of Syrians living abroad who find quality education at much lower cost than universities abroad (Kogan, 2016). This, in turn, has forced universities in Syria to re-think their student recruitment campaigns with a view of positioning themselves as preferred education providers. Central to the positioning of universities as preferred education providers' notion, is the perceived image universities have in students' minds when they are selecting universities (Parameswaran & Glowacka, 1995; Wilkins and Huisman, 2015). Consequently, there has been some recent promotional strategies developed by private universities in Syria. For instance, in mid-July, 2016, Arab International University launched an open day to encourage prospective students to select this university as their preferred tertiary education provider.

Although scholarly interest in corporate image has previously established the importance of image to corporate success (Wilkins & Huisman, 2014), relatively little research has been conducted on the image of service-oriented organizations such as universities (Sung & Yang, 2008), and the role that word of mouth (herein WOM) plays in students' selection of tertiary education providers We attempt to bridge this knowledge gap by establishing and empirically testing a conceptual model that identifies and measures the factors that contribute to word of mouth behaviors among tertiary education students. In doing so, we contribute to the nascent literature in this domain by expanding the extant knowledge on how universities based in Syria can adjust their marketing and student recruitment practices to create an image in the market consistent with the type of students they wish to recruit.

2.0 Literature Review

2.1 Students' Perceptions

A central notion of marketing is to design and deliver a value proposition desired by the market. In the tertiary education market, students are seen as the primary consumers of the value proposition (Lizzio, Wilson & Simons, 2002). Consequently, their views are sought by universities when universities attempt to improve their value propositions (Kember, Leung & Kwan, 2002; Leckey & Neill, 2001). Thus, much of data collected on students' perceptions of tertiary education is post facto (that is, after they have been recruited and enrolled in university programs) and centers around their perceptions of *assessment* (Struyven, Dochy & Janssens, 2003), *learning outcomes* (Eom, Wen & Ashill, 2006), *course structure* (Kreber, 2003), and *learning approaches* (Gibbs & Coffey, 2004). To date, scholarly work has not addressed how students perceive universities and their educational programs when selecting universities. The lack of empirical work on students' perceptions of university educational programs is surprising given the intense competition among universities at national and international levels (DeShields, Kara, & Kaynak, 2005; Stensaker, 2007) for both students and academics (Belanger, Mount & Wilson, 2002).

2.2 Perceived quality in higher education

Consumer satisfaction with service quality has long attracted the attention of marketing scholars (Caruana, 2002; Kuo, Wu & Deng 2009; Tam, 2004; Taylor and Baker, 1994). This is not surprising, since a number of studies have shown strong relationships between consumer satisfaction and consumer loyalty (Helgesen & Nesset, 2007). In a tertiary educational context, perceived quality is a multidimensional construct that has been empirically examined from various perspectives. One evaluation criteria for perceived quality of higher education programs

is teaching quality (Richardson, 2005), that is, students select educational programs based on the academic qualifications (research output, years of teaching) of the faculty teaching staff. In tertiary education, *quality perception* occurs prior to course selection, during the study of the course, and post course (overall) evaluation.

Another assessment criteria for perceived quality in higher education is *academic advisement*. Academic advisement can take various forms, most notably; careers advice, course selection advice, and academic progress advice (Heisserer & Parette, 2002). Further, as Hill (1995) demonstrates, perceived service quality in higher education is a function of perceived service performance. The perceived service performance-perceived service quality dyad, is influenced by the extent to the consumer as part of the service delivery process (Auh, et al 2007) which in turn, is posited to lead to greater student satisfaction (Oldfield & Baron, 2000).

2.3 Student satisfaction

Student satisfaction is a complex phenomenon (Elliott and Shin, 2002). Whilst there have been numerous examinations of what constitutes student satisfaction, to date there is no universally accepted definition of this construct (Swan, 2001). Extant scholarly work on student satisfaction has tended to use narrow definitions to explain the construct, mainly within specific education contexts and learning environments. For instance, Wu, Tennyson, & Hsia (2010) defined it within a blended learning environment, whereas Bolliger (2004) defines it within an online learning environment. Astin, (1993) offers a broader definition: the student's perception pertaining to their college experience and perceived value of the education received while attending an educational institution. Student satisfaction is generally accepted as a short-term attitude resulting from an evaluation of a student's educational experience (Elliot & Healy, 2001). A critical element of Astin's definition is a student's experience and its effect on their

satisfaction. In light of these definitions, DeSheilds, Kara, & Kaynak, (2005) students who have a positive college experience are more likely to be satisfied with the college or university than students who do not have a positive college experience. These findings give rise to the understanding that student satisfaction extends beyond satisfaction with a particular academic program (Sevier, 1996), and leads to the idea that satisfaction among students is positively related to improved student retention among tertiary education providers (DeShields, Kara, & Kaynak, 2005; Douglas, Douglas, & Barnes, 2006).

A significant challenge in understanding the antecedents and causes of student (dis)satisfaction is a university's ability to collect reliable data and measure satisfaction accurately. Traditionally, universities have captured student satisfaction with close-ended questions where 'yes' or 'no' responses are required (Elliott & Shin, 2002). The evaluation of satisfaction is based on a cognitive process where individuals compare prior expectations with actual performance (Lee, Lee & Yoo, 2000). Typically, satisfaction is captured using a single item or multi-item level of measurement (Szymanski & Henard, 2001). A single item approach would assess only a customer's overall satisfaction with a product. A multi-item level of measurement attempts to first assess a customer's satisfaction with each attribute or dimension of a product/service and then to sum the satisfaction assessments into an overall satisfaction score (Elliott & Healy, 2001). A related problem with student satisfaction measures, is that the data collection instruments usually do not take into account factors like the prior skills and abilities of students in the analysis (Wiers-Jenssen, Stensaker, & Grogaard, 2002). In our study, student satisfaction is measured using Alves & Raposo's (2010) work. An example item: "I think my university is perfect."

2.4 University image

Institutions of higher education are under increasing pressure to create and maintain a distinct image in their markets amid increasing competition and reduced government funding (Parameswaran & Glowacka, 1995). Consequently, organizations engage in a variety of strategies for influencing external constituencies' assessment of the organization (Chun, 2005). University image has a strong effect on attracting potential students (Ivy, 2001; Sung & Yang, 2008) and maintaining strong relationships with funding bodies and stakeholders (Landrum, Turrisi, & Harless, 1999). As such, how universities brand themselves has an effect on their image (Beerli Palacio, Díaz Meneses, & Pérez Pérez, 2002).

To examine factors that affect the perceptions of universities' image, Arpan, Raney, & Zivnuska (2003) conducted a two group study, namely, university students and non-university students, and found that among current university students, three factors significantly predict university image: academic factors, athletics factors, and the extent of news coverage of the university, whereas among the adult non-student sample group, four factors significantly predicted university image: the educational level of the respondents, academic and athletic attributes, the respondents level of sports fanaticism, and the extent of news coverage. Other university image related factors include the university's drop-out rates (Araque, Roldan, and Salguero, 2009), university's ranking (Deem, Mok, & Lucas, 2008), the university's collaboration with industry (D'Este & Patel, 2007), and cultural factors affecting university image (Kazoleas, Kim, & Moffit, 2001). In light of these findings, in our study, university image is measured as uni-dimensional 5-item scale. Our measurement scales were grounded in scale development literature (Alves & Raposo, 2010; Alves & Raposo, 2007a; 2007b). An example scale item is: "My university has a good academic reputation."

2.5 University student's WOM behavior

"Word-of-mouth insights lead to smarter business decisions" (Allsop, Bassett, & Hoskins, 2007, p. 407). Extant research has demonstrated the influence of WOM on behaviors and attitudes (Harrison-Walker (2001). Scholarly work in consumer behavior has empirically validated the link between the time consumers learn about products and the time they form attitudes regarding the products (Fishbein, 1967). In turn, their attitudes towards given products may result in either positive or negative WOM communication regarding the product (Browne, et al 1998). In an educational context, Browne, et al (1998), posit a direct positive relationship between students recommending university courses to friends and relatives and the extent of the interaction the students had with university personnel, Similarly, Borgida & Nisbett (1977) found that college students were influenced by WOM when considering college courses. Since Borgida & Nisbett's (1997) study, the evolution of computer technology has provided students with additional opportunities for accessing and participating in WOM about university programs and the quality of instruction (Wilhelm & Comegys, 2004). In light of the limited works of WOM in an educational context (Edwards, Edwards, Qing, & Wahl, 2007), our study examines the WOM behaviors of students with a 3-item scale based on Teo & Soutar (2012). An example item: "I often recommend this university to others."

2.6 University Deregulation and Ownership

The importance of university education to the individual in particular and the society in general, has resulted in an increase in demand for education in the last thirty years, often resulting in a very high percentage of unsatisfied demand (Ajayi & Ekundayo, 2008). Against this backdrop, the role of national governments in regulating higher education is also increasing (Altbach, Reisberg, & Rumbley, 2010). The regulation reform involves permitting private

universities (either locally or foreign owned) to establish educational programs that compete with government funded tertiary institutions (Adeogun, Subair & Osifila, 2009; Kweik, 2016; Muta, 2000). The increase in competition gives rise to the notion of deregulation in higher education, which Ajayi & Ekundayo (2008) define as breaking the government's monopoly of the provision and management of education by giving free hand to private participation in the provision and management of education in the country by relaxing the legal and governmental restrictions on the operations of education business.

The rationale behind governments permitting private universities to establish a presence in their countries is primarily two-fold. First, to ease the financial burden of funding tertiary education on the state, and second, to cater for an increasing demand for university places resulting from different motivations to study, and different career aspirations (Correia, Amaral, & Magalhães, 2002). Despite an increase in the privatization of tertiary education, little is known about how public universities fare compared to private universities in terms of student's attitudinal outcomes and any subsequent WOM behavior. To the best of our knowledge, our study comes to be the first at exploring variances in such attitudinal and behavioral outcomes between private and public universities, in the Middle East.

3.0 Conceptual model and hypotheses

Previous studies have regarded perceived quality as a predictor of student satisfaction (Cardona & Bravo, 2012; Danjum & Rasli, 2012; de Jager & Gbadamosi, 2013). Mahmoud & Khalifa (2015) identified three dimensions of perceived quality for universities, namely, faculty individualized attention, support staff helpfulness, and support staff empathy). Together, these findings suggest,

H1: Faculty individualized attention is positively related to student satisfaction.

- H2: Support staff helpfulness is positively related to student satisfaction.
- H3: Support staff empathy is positively related to student satisfaction.

The relationship between service quality and corporate image has attract significant scholarly interest. Many scholars have indicated the existence of a rigorous relationship between the two variables in *the services sector* (e.g., Nguyen & Leblanc, 2001; Herstein, Mitki, & Jaffe, 2008; Zameer, Tara, Kausar, & Mohsin, 2015; Wu, 2014) and specifically in *the higher education sector* (e.g., Jiewanto, Laurens, & Nelloh, 2012; Luque-Martínez & Del Barrio-García, 2009) and in the Middle East *tertiary education sector* (e.g., Azoury, Daou, & EL Khoury, 2014). In light of the findings within the extant studies, we offer the following hypotheses,

- H4: Faculty individualized attention is positively related to university image.
- H5: Support staff helpfulness is positively related to university image.
- H6: Support staff empathy is positively related to university image.

Several studies have been conducted to establish a relationship between service quality and WOM behaviors. A number of scholars concluded a significant relationship between the two constructs either directly (e.g., Liu & Lee, 2016), or indirectly through mediators such as customer satisfaction (Kitapci, Akdogan, & Dortyol, 2014). Thus, we predict,

- H7: Faculty individualized attention is positively related to WOM.
- H8: Support staff helpfulness is positively related to WOM.
- H9: Support staff empathy is positively related to WOM.

Previous studies failed to establish a direct relationship between university image and student satisfaction (Jiewanto, Laurens, & Nelloh, 2012). Other studies examined university image as an antecedent to student satisfaction (Alves & Raposo, 2010; Azoury, Daou, & El Khoury, 2014). However, we argue that a satisfied student is likely to develop positive personalized university image. Thus, we propose,

H10: Student satisfaction is positively related to university image.

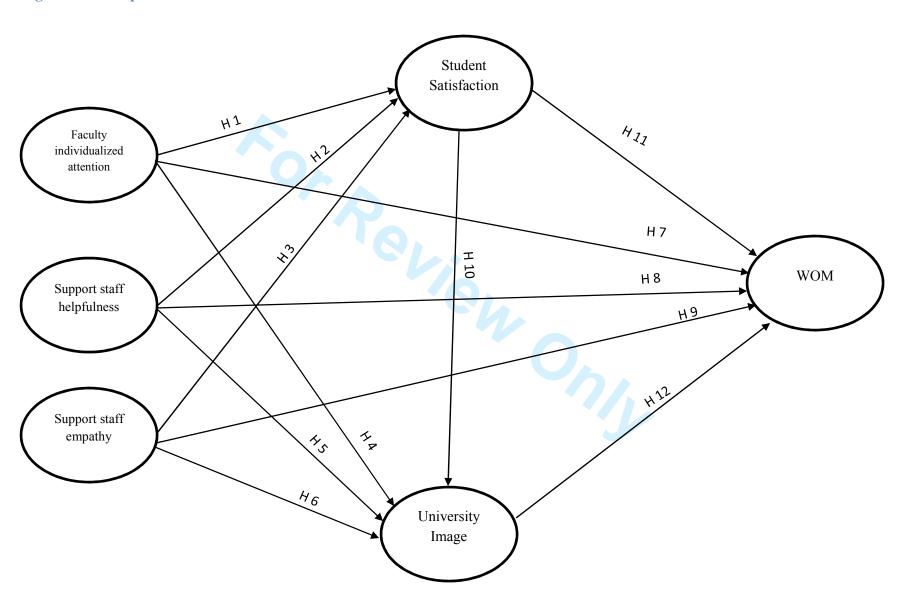
Revisiting previous research, customer satisfaction has been regarded as a predictor of favorable WOM (Anderson, 1998; Lee, 2016). Satisfied students were found to exhibit favorable word of mouth behaviors. For example, James & Casidy (2016) regarded promoting behaviors as an expected outcome of student satisfaction. In general, WOM behaviors variances could be explained by student satisfaction (Alves & Raposo, 2007a; 2007b; Clemes, Gan, & Kao, 2008; Schlesinger, Cervera, & Pérez-Cabañero, 2016). Together these arguments suggest,

H11: Student satisfaction is positively related to WOM.

Although some scholars concluded that WOM is an antecedent to university image (Alves & Raposo, 2010; Clow, Kurtz, Ozment, & Ong, 1997), we argue, based on Ajzen & Fishbein's (2005), that WOM are behaviors that would result from favorable associations held by student's mind toward their university. Consequently, we propose,

H12: University image is positively related to WOM.

Figure 1: Conceptual model



4.0 Methodology & Data Analysis

The setting of our study is Syria during the country's crisis. We targeted higher education students as respondents at both private and public universities and higher institutions. Only regions under the state control were included (e.g., Damascus and coastal areas). Other territories controlled by opposition and other forces were excluded due to their inaccessibility. We constructed a self-administered cross-sectional survey. The survey was administered to 1,500 students during classes using a convenience sampling that resulted in 302 usable responses. The survey was designed to measure student's profile (e.g., gender and university type; private or public) and attitudinal variates postulating the WOM model depicted in Figure 1 (namely, faculty-individualized attention, support staff helpfulness, support staff empathy, university image, and word of mouth). A set of quantitative methods were used including structural equation modeling to test hypotheses, and bootstrapping to analyze mediations. Further, a qualitative approach was used to understand the results that lacked explanation from previous literature.

Based on the work of Mahmoud and Khalifa (2015), we tested the assumption that perceived quality is a three-dimension structure. Our findings, (RMESA = 0.066 < 0.08, SRMR = .0376 < .08, $\chi 2/df = 2.297 < 3$, NFI = .954 > .9, and CFI = .973 > .9) (Bentler, 1990; Byrne, 2010; Hu & Bentler, 1995; Jöreskog & Sörbom, 2015; MacCallum, Browne, & Sugawara, 1996) validated the assumption that service quality in higher education is a three-factor construct (see Figure 2) comprising faculty individualized attention ($\alpha = .84$), support staff helpfulness ($\alpha = .9$), and support staff empathy ($\alpha = .92$). Moreover, this three-dimension structure was found to be

invariant between public and private universities (see Table 1). All alpha values for the rest of constructs were within acceptable limits (see Table 2).

Table 1: Assuming model Unconstrained to be correct:

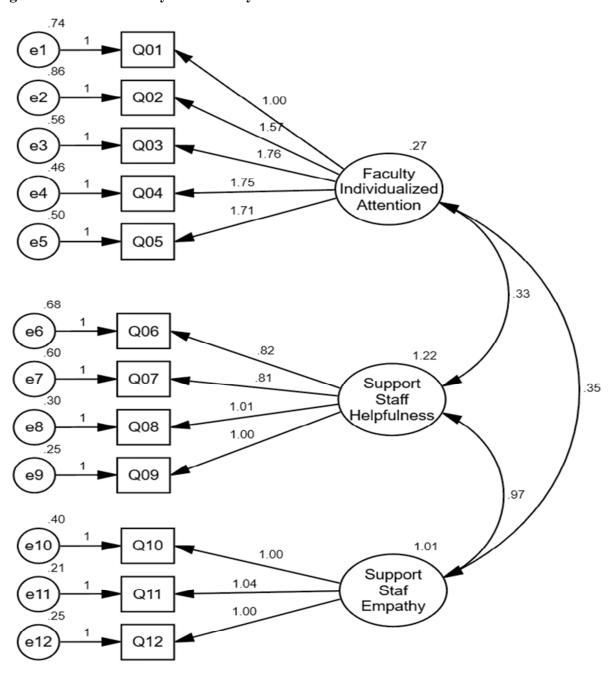
Model	DF	CMIN	P	NFI Delta-1	IFI Delta-2	RFI rho-1	TLI rho2
Measurement weights	9	12.181	.203	.005	.005	001	001
Structural covariances	15	17.887	.269	.007	.008	003	003
Measurement residuals	27	29.245	.349	.012	.012	006	006

Table 2: Descriptive statistics, reliability, and inter-correlations

Construct	Mean	SD	α	Items #					
Faculty individualized attention	2.50	0.89	0.84	5					
Support staff helpfulness	2.61	1.07	0.90	4	.509**				
Support staff empathy	2.17	1.06	0.92	3	.576**	.781**			
University Image	2.84	0.95	0.87	5	.674**	.545**	.491**		
Student Satisfaction	2.91	1.02	0.93	6	.627**	.541**	.465**	.820**	
Word of Mouth	3.09	1.14	0.88	3	.575**	.512**	.451**	.819**	.846**

^{**} P < .01

Figure 2: A confirmatory factor analysis for SERVPERF



5.0 Results

5.1 Data description

Table 3: Sample characteristics

Variables	Values	Frequency	% Frequency
	Public	142	47
University Type	Private	160	53
	Total	302	100
	Male	157	52
Gender	Female	145	48
	Total	302	100
	22 years or younger	190	62.9
Age	Older than 22 years	112	37.1
	Total	302	100

5.2 Path analysis

Before proceeding to structural path analysis, it is worth noting that in the context of confirmatory factor analysis and structural equation modeling, the root-mean-square error of approximation (RMSEA), the Tucker– Lewis index (TLI), the goodness-of-fit index (GFI), and normed fit index (NFI), can be seen as analogous indexes to effect size evaluations (Kelly & Preacher, 2012; Meyers, et al., 2017). Our hypotheses represented in the path model are tested using structural equation modeling (SEM) with Maximum Likelihood Estimation. The results show that hypotheses H1, H2, H4, H10, H11, H12 were all supported. We found partial support for H3, suggesting support staff empathy has a significant, yet negative instead influence on student satisfaction. The values of Chi-square (Bollen, 1989), comparative fit index (Bentler, 1990), normed fit index, standardized root mean square residual (Hu & Bentler, 1995), and root mean square error of approximation (Browne & Cudeck, 1992) exhibit that the path model has a good fit for the observed data. Hypotheses H5, H6, H7, H8, and H9 were not supported.

Table 4: The path model.

	Estimate (\$\beta\$)		
Student Satisfaction	<	Support Staff Helpfulness	0.609***
Student Satisfaction	<	Support Staff Empathy	-0.475***
Student Satisfaction	<	Faculty-individualized Attention	0.654***
University Image	<	Faculty-individualized Attention	0.307***
University Image	<	Student Satisfaction	0.644***
University Image	<	Support Staff Helpfulness	0.192
University Image	<	Support Staff Empathy	-0.136
Word of Mouth	<	Student Satisfaction	0.477***
Word of Mouth	<	University Image	0.613***
Word of Mouth	<	Faculty-individualized Attention	-0.126
Word of Mouth	<	Support Staff Helpfulness	-0.026
Word of Mouth	<	Support Staff Empathy	0.025
		$\chi^2/df = 2.186 < 3$	
		CFI = .949 > .9	
		NFI = .911 > .9	
		SRMR = .0460 < .08	
		RMESA = .063 < 0.08	

*** *P* < .0001

Additionally, Bootstrapping was used during assessing indirect effects in the alternate model (Mahmoud & Reisel, 2014) and all mediations are proved to be significant (see Table 5). These findings suggest individualized attention increases the chances of positive WOM behaviors through both elevating student satisfaction and improving university image perceptions (B = 1.464). Further, student satisfaction partially transmits positive effects from faculty individualized attention to university image. Support staff helpfulness resulted in positive WOM through enhancing the levels of student satisfaction (B = .608). Inversely, support staff empathy lowers the possibility for positive WOM behavior (B = -.512) and favorable university image (B = -.229) because it negatively impacts student satisfaction. Support staff helpfulness promotes for favorable university image through improving student satisfaction (B = .267).

Finally, student satisfaction makes positive WOM behaviors more positive not only directly, but also indirectly through developing positive university image.

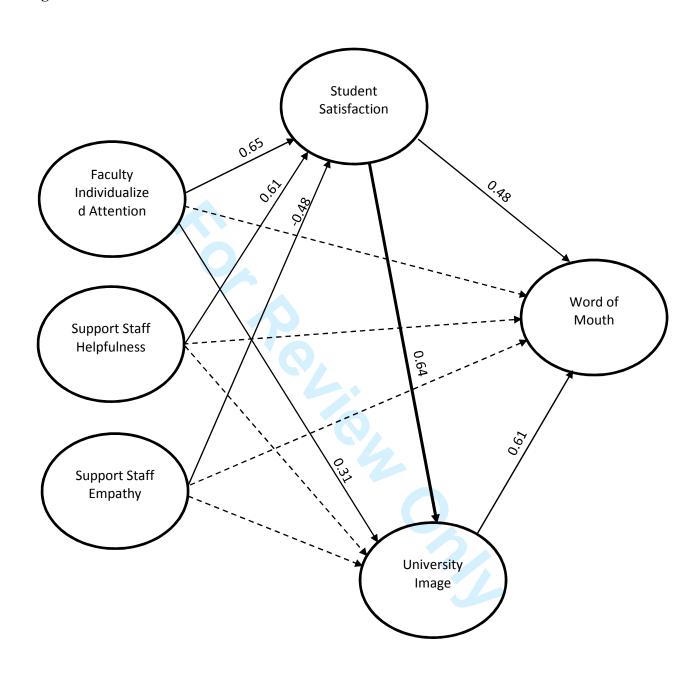
Table 5: Testing indirect effects.

#	Mediation Path	Mediation Estimate	Mediation Type ¹
		В	
1	Faculty-individualized attention → Satisfaction * UI → WOM	1.464**	Full
2	Support staff helpfulness → Satisfaction → WOM	.608**	Full
3	Support staff empathy → Satisfaction → WOM	512**	Full
4	Faculty-individualized attention → Satisfaction → UI	.591**	Partial
5	Support staff helpfulness → Satisfaction → UI	.267**	Full
6	Support staff empathy → Satisfaction → UI	229**	Full
7	Satisfaction → UI → WOM	.502**	Partial

^{**} P < .01

¹ Based on Baron & Kenney (1985)

Figure 3: Path Model².



² Dashed arrows represent non-significant linkages

5.3 Path invariance between public and private universities

University ownership type moderates the path model. Specifically, private universities' student satisfaction exerts more powerful effect on university image than it does in public universities' ($\beta_{private} = .85 > \beta_{public} = .60$, $\chi^2 = 196.206$, df = 53).

Table 6: Assuming model Unconstrained to be correct:

Model	DF	CMIN	P	NFI	IFI	RFI	TLI
Model	Dr	CIVIIIN	Ρ	Delta-1	Delta-2	rho-1	rho2
Measurement weights	20	32.440*	.039	.005	.005	.000	.000
Measurement intercepts	46	177.415**	.000	.025	.027	.015	.017
Structural weights	53	196.206**	.000	.028	.030	.016	.018
Structural covariances	59	199.471**	.000	.028	.031	.015	.017
Structural residuals	62	199.734**	.000	.028	.031	.014	.016
Measurement residuals	95	246.506**	.000	.035	.038	.012	.014

^{*} *P* < .05; ***P* < .0001

Understanding the negative effect of support staff empathy on student satisfaction

To make an insightful reasoning from our very novel finding that student satisfaction is negatively related to support staff empathy, we ran focus groups with 31 students located in Damascus enrolled in both public and private universities. The main theme of the interactive discussion related to why individualized empathy offered by support staff made them feel unhappy. Using a thematic analysis, we identify six themes showing how empathy could lead to harsh feelings among students:

1. *Deception/credibility/Soft-soapers/Suspiciousness*. Some students regard support staff empathy as a kind of soft-soap that coaxes them into act in favor of support staff. This reflects a type of false empathy towards students.

- 2. *Confusion/role conflict*. Support staff handle a variety of roles while interacting with students including proctoring duties. For example, many students get confused about how such austere proctors would show empathy outside exam rooms.
- 3. *Unfairness*. Some students believe that empathy should be offered on the same level and an equal basis to all students.
- 4. *Privacy*. In some cases, students would consider support staff empathy as kind of intrusion, and consequently, as an intention to invade student's privacy [... support staff should set restrictions on knowing my particularities ... I sometimes feel concerned about the extent to which support staff pay attention to me.]
- 5. *Self-congratulatory*. Some students might get offended when they support staff would show off or praise empathy behaviors [... some support staff think they do me a favor if they give me an individual attention.]
- 6. Support staff/student ratio. Having a relatively small number of support staff members would reverse any possible positive effects for empathy on student satisfaction [... Insufficient members of support staff, therefore, they're unable to recognize my individual needs.]

6. Discussion and Recommendations

Our study used a mixed methods research design that comprises both quantitative and qualitative procedures to analyze the hypothesized relationships among the variables (Tharenou, Donohue, & Cooper, 2007). Using structural equation modeling, we developed a path model predicting university student's WOM behaviors beginning with perceived quality through student satisfaction and university image. Moreover, we tested for invariance assessment for the

path model between private and public universities. Mediations were tested using a bootstrapping procedure.

Consistent with findings from previous research, our results show university student satisfaction to be predicted by perceived quality satisfaction (e.g., Athiyaman, 1997; Cardona & Bravo, 2012; Danjum & Rasli, 2012; de Jager & Gbadamosi, 2013). Unlike support staff empathy, faculty individualized attention and support staff helpfulness are positively related to student satisfaction. To make sense of this surprising finding, we ran a focus group with 31 university students in Syria. We found that self-soap, confusion, unfairness, privacy invasion, and/or self-congratulatory expressed support staff while showing empathy can reverse the axiomatically presumed relationship between support staff empathy and student satisfaction, so can do a lower ratio of support staff/student.

Faculty individualized attention (Jiewanto, Laurens, & Nelloh, 2012; Luque-Martínez & Del Barrio-García, 2009) and student satisfaction are found to be positively related to university image. Student satisfaction (Alves & Raposo, 2007a; 2007b; Clemes, Gan, & Kao, 2008; Schlesinger, Cervera, & Pérez-Cabañero, 2016) and university image are concluded to be direct sources of positive student's WOM behaviors.

Although a direct relationship is not found between perceived quality and WOM, the three dimensions of perceived quality exert their effects, indirectly, over WOM. Similarly, university image is an indirect outcome of perceived quality, or as a mediator between faculty individualized attention and WOM. Our mediation analysis also shows an indirect path between student satisfaction and WOM through university image.

Finally, university type moderates our path model. More specifically, the vital role played by student satisfaction in forming favorable university image and consequently a desired set of WOM behaviors. Therefore, student satisfaction plays a powerful role in contributing to the university positioning and student loyalty, reflecting indirectly on student's WOM behaviors.



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