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Gender differences in the perception of the Quality of College Life in Spanish University

Abstract: The goal of this research is to empirically verify how students differ in their levels of quality of college life according to gender, and how this relates to overall quality of life and loyalty to their specific university. The survey included 243 students attending public university in Spain. The results show significant differences between men and women both in the configuration of the quality of college life and in its effect on the loyalty shown towards the college. This paper contributes towards an improved comprehension regarding the differences between the students according to their gender, so that managers can develop strategies better adapted to students.

Keywords: Quality of College Life (QCL), Student Satisfaction, Installations Satisfaction, Education Satisfaction, Social Satisfaction, Quality of Life (QoL), Identification, Positive Word of Mouth (WoM), Gender differences, the effect of gender, University.

Reference to this paper should be made as follows: Author. (xxxx) 'Title', *Int. J. xxxxxxxxxx xxxxxxxxxx*,

1 Introduction

In today's competitive environment, universities are facing enormous challenges with increasing student enrollment. In order to cope with this issue, universities must introduce improvements in how they function, and follow up these steps with quality control analysis. However, quality is not limited to the traditional domain of academic results. It has also come to encompass student satisfaction, considered a source of potential competitive advantage that may prove to be crucial for student retention as well as a factor influencing overall life satisfaction (Sirgy et al., 2010).

Student satisfaction with their educational experience results from a combination of factors. Sirgy et al. (2007) developed a model that suggested that academic aspects, social factors and facilities can all have a positive impact on student satisfaction. Subsequent papers have used the Sirgy et al. (2007) model to identify the factors relevant to student satisfaction in different countries or contexts. However, few publications attempt to identify the aspects of experience that most differentiate students' overall satisfaction based, for example, on their gender.

The Quality of College Life (QCL) is a crucial element in the effective functioning of a university on the competitive national and international market (Arslan and Akkas, 2014). QCL described by a specific type of study involving students and their quality of life. In this case, it is the impact enacted by the overall satisfaction with college life, as perceived by the customers - the students – and its influence on their loyalty and Quality of Life (QOL) (Arslan and Akkas, 2014; Blazquez et al., 2013; Sirgy et al., 2007; Sirgy et al., 2010; Yu and Lee, 2008).

Our goal with this publication is to report the results of our study, which shows significant differences between male and female perceptions of Quality of College Life (QCL), Quality of Life (QoL) and loyalty (Identification and Word of Mouth). So far, only a few studies have examined the effect of gender on college students' satisfaction (Tessema et al., 2012) and service quality (Ilias et al., 2009) yet their findings were inconsistent. Tessema et al. (2012, p.1) found that 'gender has a significant effect on students' satisfaction'.

2. Quality of College Life (QCL)

Quality of college life (QCL) refers to the overall feeling of satisfaction students experience in college (Yu and Lee, 2008, p. 269). QCL is a sub-domain of Quality of life (QoL) (Sirgy et al., 2007), which measures satisfaction with overall life as a whole. QCL was defined by Sirgy et al.

(2007, p. 346) as an 'overall feeling of satisfaction a student experiences with life at the college'. Therefore, QCL is a significant indicator from the university administration's point of view since it involves programs and services that can be corrected by the university administration (Sirgy et al., 2010).

2.1 Satisfaction with College Services

College life is only one section of students' whole life. Therefore, satisfaction (Badzińska and Gołąb-Andrzejak, 2015) should be examined from the university life perspective (Bini and Masserini, 2016; Douglas et al., 2015) with reference to QCL. Satisfaction with college life is influenced by the services provided by the university (Yu and Lee, 2008). Sirgy et al. (2007; 2010) conducted research showing that two types of student experience in college determine QCL: satisfaction with the academic as well as the social aspects of the college. They adopted the assumption that both the academic and social aspects of the university are influenced by satisfaction with university facilities and services. Yu and Lee (2008, p. 274) conceptualized satisfaction with college services as having three sub domains: educational service, administrative service and facilities. The results of the study indicated that QCL is significantly influenced by satisfaction with educational services and satisfaction with facilities.

Based on the aforementioned research, an assumption was made such that QCL is influenced by satisfaction with education at the college and satisfaction with the social aspects of college life. Satisfaction with the resources and facilities (installations) also affects the educational and social aspects of students' university life.

2.2 Effects of Quality of College of Life (QCL)

The relationship between QCL and Quality of life (QOL) was presented in an extended model proposed by Sirgy et al. (2010), explained by using spill over theory (Sirgy, 2001, 2002). Based on this theory, life satisfaction 'is functionally related to satisfaction with all of life's domains and sub-domains' (Sirgy et al. 2010, p. 383). Life satisfaction perceived as QOL is at the top of the satisfaction hierarchy. Satisfaction with QCL plays a significant role in influencing quality of life satisfaction (Yu and Lee, 2008).

However, identification is and additional consequence of QCL. When the assessment of QCL as perceived by students is elevated, they are then more willing to identify positively with the college (Henning-Thurau et

al., 2001). Based on the study made by Yu and Lee (2008), it may be assumed that when students have a positive perception of QCL at their college, they favourably identify with the college as an attractive environment to be in, ergo strengthening their overall identification with the college. This furthermore also has a positive influence on their commitment to the college (Henning-Thurau et al., 2001).

Finally, we found that word of mouth (WoM) is another consequence of QCL. WoM described as 'interpersonal communication among members of the reference group' (Assael, 2004; Yu and Lee, 2008). Consumers - based on their experience - communicate positive or negative opinions. Following the research made by Yu and Lee (2008), we may assume that QCL has a positive influence on students' positive word of mouth (WoM). When the students are satisfied with their college life they are willing to speak positively in regards to the university. Thus, QCL indeed positively influences on word of mouth.

3 Gender in Satisfaction and Quality

In the academic domain, numerous studies have been conducted to examine the influence of gender on students' satisfaction. The situation is not consistent in the mumerous results since, while some researchers found that gender has a significant influence on student's satisfaction (e.g. Perry et al., 2003; Rienzi et al., 1993; Sax et al., 2005; Umbach and Porter, 2002), others found no significant difference between male and female students in this regard (e.g. Carey et al., 2002; Corts et al., 2000; Dirkin et al., 2005; Ilias et al., 2009; Mupinga et al., 2006; Rosenthal et al., 2000; Strayhorn and Saddler, 2009; Witowski, 2008).

However, as suggested by the research that found significant influence of gender, the results generated contradictory conclusions. Some papers discovered that women are less satisfied than men (e.g. Rienzi et al., 1993; Umbach and Porter, 2002) while others revealed that women seemed to be more satisfied (e.g. Perry et al., 2003).

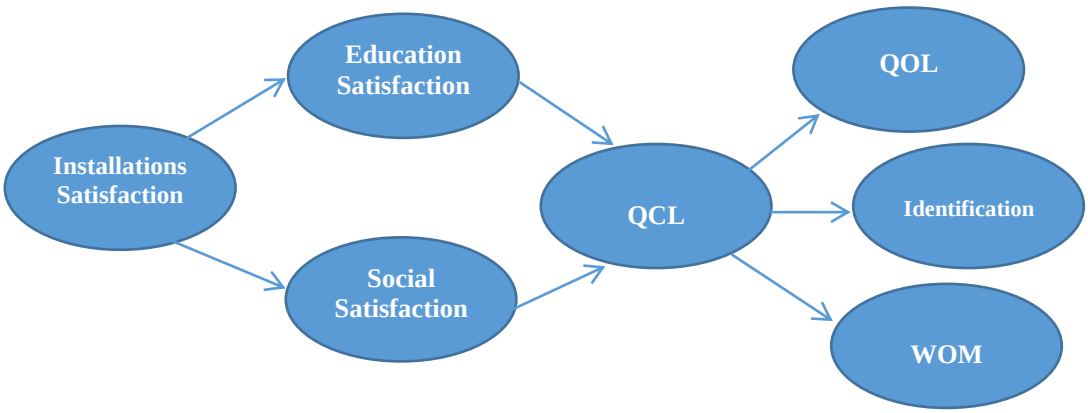
A similar situation may be observed when we take into account the gender effect on service quality. Soutar and McNeil (1996) unearthed a significant relationship between gender and satisfaction with service quality, such that the authors found that males are more satisfied than females. However, based on a study by Joseph and Joseph (1998), we cannot perceive any significant difference between males and females. Ansary et al. (2014) reached a similar conclusion. Similarly, Ham and Hayduk (2003) also supported the finding that gender has no significant relationship with perceived service quality even though the findings show that men are more satisfied in comparison to women (Ilias et al., 2009, pp.

134). Therefore, the situation, as suggested by the numerous studies, is ambiguous. Whereas in some studies academics have found that gender has no significant relationship with perceived service quality, other findings show that males are more satisfied compared to females.

3.1. QCL Conceptual Model

The conceptual model is shown in Figure 1, where the main constructs are as follows: Satisfaction with different aspects of college life (Facilities and Services - Installations, Academic life - Education and Social life), Quality of College Life (QCL), Quality of Life (QoL), Identification and Word of Mouth (WoM). 'QCL is hypothesized to be determined by positive and negative impacts on two types of student experiences in college, namely satisfaction with the academic aspects (education) of the college and the social environment. Satisfaction with academic aspects, in turn, is hypothesized to be influenced by satisfaction with university facilities and services. Similarly, satisfaction with the social aspects is believed to be influenced by satisfaction with university facilities and services' (Sirgy et al., 2007, p. 345). Simultaneously QCL hypothetically affects Quality of Life (QoL), Identification and Word of Mouth (WoM).

Figure 1 Quality of College life Conceptual Model



Yu and Lee (2008) hypothesized that satisfaction with education services, administrative services, and facilities have a significant impact on QCL, which in turn positively influences identification, positive word of mouth, and overall quality of life.

Based on the previous theoretical analysis (Soutar and McNeil, 1996), an assumption was created, such that satisfaction depends on gender and

that men are more satisfied than women (Arbaugh et al., 2010, p. 394). Concurrently, the effect (dependence) of QCL on QoL, Identification and WoM is higher for male than for female students. Accordingly, the hypotheses that were developed are listed as follows:

H1. Male students have higher satisfaction with installations (facilities and services), which in turn leads to higher satisfaction with the education provided by the college than female students.

H2. Male students have higher satisfaction with installations (facilities and services) which in turn leads to higher satisfaction with the social aspects of the college than female students.

H3. Male students have higher satisfaction with the educational aspects of the college which leads to a more positive perception of QCL than female students.

H4. Male students have higher satisfaction with the social aspects of the college which leads to a more positive perception of QCL than female students.

H5. Male students have a more positive perception of QCL which in turn gives them a more favourable perception of QoL than female students.

H6. Male students have a more positive perception of QCL which makes them feel more strongly identified with the college than female students.

H7. Male students have a more positive perception of QCL which in turn has a favourable impact on their positive word of mouth (WoM) about the college when compared with female students.

4. Methodology

This study opted for a quantitative research design for our reserach. A questionnaire was developed as the primary data collection tool. The research-derived measures for key constructs were developed from existing scales in the subject literature. We based this research on previous work (Blazquez et al., 2013; Sirgy et al., 2007; Yu and Lee, 2008) and reviewed more recent articles (e.g. Arslan and Akkas, 2014; Stephenson and Yerger, 2015) to adapt the scales to measure the latent variables used in this study. Seven constructs were selected: Quality of College Life (QCL), three antecedents (Installations satisfaction, Education satisfaction, and Social satisfaction), and three consequences (Quality of Life, Identification, and Word of Mouth). The items and responses of these

scales appear on a seven-point Likert type scale, ranging from 1 (strongly disagree) to 7 (strongly agree). In addition, the questionnaire collected data on the sociodemographic characteristics of the individual students (e.g. gender, age, degree and grade).

The survey was initially pilot-tested on a sample of market research students and the results were used to amend the survey and ensure its content validity, such that only minimal revisions were necessary. The final data was derived from questionnaire responses for the students of the Faculty of Social Science of the University of Castilla-La Mancha (Spain). In this faculty, impart teach three degrees related to Social Sciences: Business Administration, Social Work and Social Education. The analytical units used in this study were students enrolled in any of these three degrees during the 2016-2017 academic year. Quota sampling was used to generate samples that were representative of the students in terms of their chosen subjects. The information was collected during the months of april and May 2017.

Finally, the data collection process resulted in 243 completed questionnaires. We used G*Power 3.1.9.2 to calculate the sample size based on statistical power (Faul et al., 2009). The statistical power of the sample is acceptable, assuming a standard error of 0.05 and an effect size of 0.15. The sample consists of students between 18 and 32 years; 40% of the respondents were male and 60% were female. There is also a balance between the academic years, with 26.7% of the respondents being students in the first year, 30.5% in the second year, 30% in the third year and 12.8% in the final year. By degree, 32.1% of the respondents were in Social Education, 37.4% Business Administration, and 30.5% Social Work.

In the process of completing the analysis, a structural equation model (SEM) was used. Structural equations models are statistical procedures that assume relationships complex, such that they offer a direct approach to dealing simultaneously with multiple dependency and relationships with unobservable concepts that is statistically efficient (Hair et al., 2011). SEM allows us to verify the measurement of functional hypotheses, both predictive and causal, applied in behavioural and social sciences, as well as management and health (Bagozzi and Yi, 1988). In particular, the research model was tested using Partial Least Squares (PLS-SEM), a variance-based structural equation modelling system (Roldan and Sanchez-Franco, 2012).

For a variety of reasons, PLS-SEM was the most appropriate method for addressing the current research questions. Initially, PLS-SEM path modelling is preferred over alternative covariance-based techniques when the primary objective of the study relates to causal-predictive analysis rather than theory testing (Hair et al., 2014). PLS-SEM allows researchers

to consider different model elements more flexibly (Sarstedt et al., 2014). Furthemore, the constructs that shape our research model correspond to a composite measurement model. Both theoretical contributions (Henseler et al., 2014) and empirical simulation studies (Becker et al., 2013) recommend the use of PLS-SEM for composite models. Finally, we used PLS-SEM mainly because nonparametric SEM techniques are appropriate for Multi-group Analysis (Hair et al., 2014; Henseler et al., 2016a). SmartPLS version 3.2.7 (Ringle et al., 2015) was used to perform the PLS-SEM analysis to assess the research model and to perform the Multi-group Analysis.

4. Results

Contrasting the hypotheses raised, the current study used a three-step approach analysis. In the first place, to estimate and analyse each individual model, PLS-SEM uses a two-step estimation process (Hair et al., 2014; Roldan and Sanchez-Franco, 2012). Initially, the measurement model is evaluated, where the relationship between the indicators and the latent variable is determined. Secondly, the structural model is analysed, where the relationships between the different latent variables are evaluated through the path coefficients and their level of significance. Finally, to compare the differences between the patch coefficients of the two groups, we performed a Multi-Group Analysis (MGA).

4.1. Assessment of the measurement model

The evaluation of the measurement model involves an evaluation of the reliability and validity of the latent variables through their relationships with associated items. In PLS-SEM, the assessment of the measurement model for reflective indicators is based on individual item reliability, construct reliability, convergent validity, and discriminant validity (Roldan and Sánchez-Franco, 2012). First, in assessing individual reliability, the loading of each indicator on its associated latent variable must be calculated and compared to a threshold. To be considered acceptable, the loading of each indicator should be higher than 0.7, while a lower loading indicates that an item should be considered for removal (Hair et al., 2011). The individual item reliability is considered adequate for the two groups because all the indicator loadings were above 0.757 (Table 1).

For the purposed of assessing construct reliability, the Composite Reliability was used, for which such on item should be higher than 0.7 (Nunnally and Bernstein, 1994). Table 1 indicates that the composite reliability for the whole construct in the measurement model for both

groups exceeds 0.7. In order to assess the convergent validity of the measurement model for both groups, we examined the average variance extracted (AVE). The AVE of the constructs must be higher than 0.5 in order for the convergent validity be considered acceptable (Hair et al., 2011). For both models, all latent variables achieve convergent validity given that their AVE values surpass the 0.5 level (Table 1).

Table 1. Assessment Results of the Measurement Model.

Construct/Associated Items	Loading		Composite Reliability		Average Variance Extracted (AVE)	
	Male	Female	Male	Female	Male	Female
Installations Satisfaction			0.951	0.950	0.867	0.863
Inst1	0.931	0.926				
Inst2	0.942	0.918				
Inst3	0.920	0.941				
Education Satisfaction			0.947	0.948	0.855	0.859
Edu1	0.924	0.905				
Edu2	0.931	0.940				
Edu3	0.919	0.935				
Social Satisfaction			0.953	0.961	0.870	0.890
Soc1	0.918	0.951				
Soc2	0.963	0.933				
Soc3	0.917	0.947				
Quality of College Life (QCL)			0.924	0.934	0.802	0.825
Qcl1	0.895	0.899				
Qcl2	0.925	0.908				
Qcl3	0.866	0.918				
Quality of Life (QoL)			0.941	0.883	0.842	0.716
Qol1	0.932	0.889				
Qol2	0.902	0.886				
Qol3	0.918	0.757				
Identification			0.926	0.920	0.678	0.658
Ident1	0.808	0.793				
Ident2	0.849	0.825				
Ident3	0.725	0.845				
Ident4	0.835	0.762				
Ident5	0.871	0.778				
Ident6	0.843	0.859				
WOM			0.955	0.940	0.876	0.839
Wom1	0.945	0.941				
Wom2	0.922	0.875				
Wom3	0.941	0.930				

Finally, the discriminant validity was determined. The discriminant validity represents the degree to which the construct diverges empirically from other constructs. To establish discriminant validity, the Fornell-Larcker criterion was used (Hair et al., 2014). This method establishes that the square root of the AVE for each construct should be greater than all of the correlations among the constructs and the other constructs in the

model. The obtained values supported the convergent validity of the two models (see Table 2) since the square root of all the AVE values exceeds the correlations between this composite and all other composites in the models (Fornell and Larcker, 1981).

Table 2. Discriminant Validity (Fornell–Larcker Criterion).

	Male							Female						
	I.S.	**S.A.**	**S.S.**	**QCL**	**QoL**	**ID**	**WOM**	**I.S.**	**S.A.**	**S.S.**	**QCL**	**QoL**	**ID**	**WOM**
I.S.	**0.931**							**0.929**						
E.S	0.643	**0.925**						0.444	**0.927**					
S.S.	0.653	0.803	**0.933**					0.404	0.679	**0.944**				
QCL	0.455	0.721	0.685	**0.896**				0.240	0.566	0.480	**0.908**			
QoL	0.344	0.485	0.471	0.427	**0.918**			0.196	0.385	0.400	0.371	**0.846**		
ID	0.565	0.627	0.726	0.616	0.531	**0.823**		0.276	0.449	0.411	0.425	0.530	**0.811**	
WOM	0.488	0.765	0.757	0.764	0.478	0.718	**0.936**	0.560	0.676	0.583	0.543	0.433	0.593	**0.916**

Notes: I.S: Installations Satisfaction; E.S: Education Satisfaction; S.S: Social Satisfaction; QCL: Quality of College life: GoL: Quality of Life; ID: Identification: WOM: Word of Mouth. The square root of AVEs are shown diagonally in bold.

In addition to the assessment of the discriminant validity in this study, the proposed HTMT ratio (Henseler et al., 2015) was employed. The HTMT index, established as a superior criterion, is the average of the heterotrait–heteromethod correlations relative to the average monotrait–heteromethod correlations. Previous studies have suggested construct thresholds of 0.9 for HTMT to establish discriminant validity (Henseler et al., 2015). Table 3 shows the results of the discriminant validity assessment using the HTMT ratio. All values are less than 0.9, ergo indicating that each of the two groups' models feature an acceptable discriminant validity.

Table 3. Discriminant Validity (HTMT Criterion).

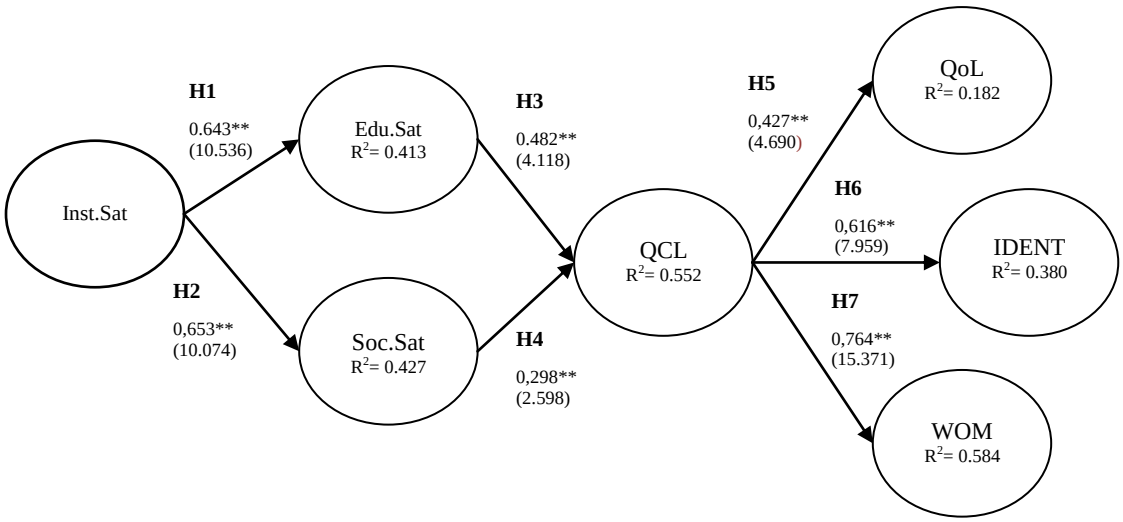
	Male						Female					
	I.S.	**S.A.**	**S.S.**	**QCL**	**QoL**	**ID**	**I.S.**	**S.A.**	**S.S.**	**QCL**	**QoL**	**ID**
I.S.												
E.S	0,700						0,480					
S.S.	0,706	0,873					0,431	0,730				
QCL	0,505	0,805	0,760				0,264	0,623	0,523			
QoL	0,368	0,525	0,505	0,466			0,208	0,435	0,436	0,424		
ID	0,613	0,684	0,793	0,687	0,567		0,298	0,492	0,447	0,471	0,612	
WOM	0,524	0,825	0,815	0,843	0,506	0,778	0,612	0,729	0,628	0,590	0,489	0,651

Notes: I.S: Installations Satisfaction; E.S: Education Satisfaction; S.S: Social Satisfaction; QCL: Quality of College life: GoL: Quality of Life; ID: Identification: WOM: Word of Mouth.

4.2. Assessment of the structural model

Since the reliability and validity of the measurement model have been established, we proceed to identify the relationships between the latent variables by analyzing the structural model. The sign, size and significance of the structural path coefficients, R^2 values, and the model fit values allow an evaluation of the structural model. Correspondingly, those path coefficients, and by extension the hypotheses proposed, that are significant according to a student's t distribution are accepted. Consistent with Hair et al. (2017), bootstrapping (5000 resamples) allowed us to evaluate the statistical significance of the coefficients. To assess the model's explanatory power, the R^2 value of the endogenous constructs was calculated. This follows the approach proposed by Falk and Miller (1992) that states that the R^2 value of the endogenous constructs must exceed the value of 0.1 for the model to be considered as having sufficient predictive capacity. The results obtained for the two models analysed are shown in Figure 2 and Figure 3.

Figure 2 – Male Students Structural Model Results

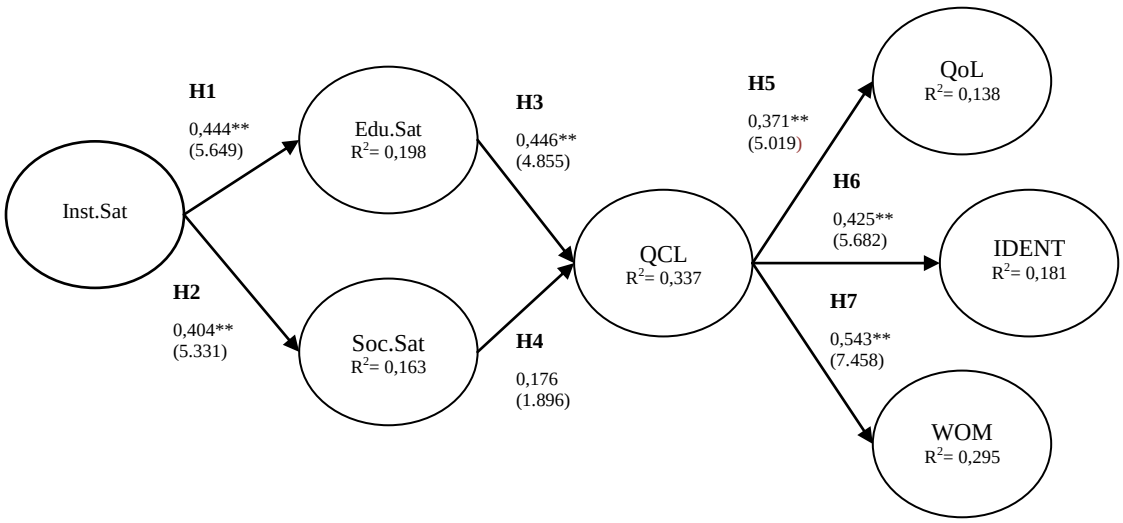


Notes: $^{*}p < 0.01$; $^{**}p < 0.001$

The results showed that male students' satisfaction with the facilities affects to a similar degree their satisfaction with education (β=0.643, p<0.01) as well as their social environment (β=0.653, p<0.01). In terms of QCL, satisfaction with the educational aspects proved more significant

(β=0.482, p<0.01) than social satisfaction (β=0.298, p<0.01). Finally, the quality of college life of a male student had a substantial effect on WoM (β=0.764, p<0.01), Identification (β=0.616, p<0.01) and Quality of Life (β=0.427, p<0.01).

Figure 3 – Female Students Structural Model Results



Notes: $^{*}p < 0.01$; $^{**}p < 0.001$

The results for female students revealed the significance of satisfaction with installations in terms of academic (β=0.444, p<0.01) and social satisfaction (β=0.404, p<0.01). However, social satisfaction did not demonstrate a significant influence on QCL. Finally, the impact of QCL significantly influenced WoM (β=0.543, p<0.01), Identification (β=0.425, p<0.01) and QoL (β= 0.371, p<0.01).

However, the R^2 values of all the endogenous constructs surpass the limit established by Falk and Miller (1992) in both models, showing the predictive capacity of the model. In contrast, since the R^2 value measures the amount of variance of the explained construct, the results show differences between both groups. The model regarding female students has lower R^2 values, which demonstrates that QCL is determined to a lesser extent by the antecedents established in the model and, in turn, has a more minor effect on the three variables considered as results. In addition, the values of the standardized root mean square residual (SRMR) as an approximate model fit for PLS-SEM were calculated for the two groups. The results revealed that the SRMR values of 0.063 for male and 0.058 for

female students are considered acceptable since they are lower than the thresholds of 0.08 (Henseler et al., 2016a).

4.3. Multigroup Analysis (MGA)

The last step is to analyse the differences between coefficients in the various paths. To assess if the differences are statistically significant, this study employed two advanced analysis techniques to perform multi-group analysis (MGA): Henseler's MGA (Henseler et al., 2009) and the permutation test (Chin and Dibbern, 2010). Moreover, prior to performing a multi-group analysis, Henseler et al. (2016b) advocate the testing of measurement invariance via the Measurement Invariance of Composites Models (MICOM) approach, suitable for PLS-SEM.

The MICOM procedure provides the method for studying the invariance proposing a three-step process involving (a) configural invariance assessment (i.e. equal method of estimation); (b) the establishment of compositional invariance assessment (i.e. equal indicator weights); and (c) an assessment of equal means and variances. If configural and compositional invariance are established, partial measurement invariance is also established, allowing the path coefficient estimates to be compared across the groups. In accordance with the MICOM procedure, the results (see Table 4) showed a partial measurement invariance. Although this study did not assess the equality of the composite mean values and variances, configural and compositional invariance was established, which is a requirement for comparing and interpreting the multigroup analysis. Thus, the results allowed the path coefficients to be compared between the samples from male and female students.

Table 4. Results of Invariance Measurement Testing Using Permutation.

Constructs	Configural Invariance	Compositional Invariance (Correlation = 1)		Partial Measurement Invariance Established	Equal Mean Assesment			Equal Varience Assesment			Full Measuerment Invariance Established
		C = 1	Confidence Interval		Differences	Confidence Interval	Equal	Differences	Confidence Interval	Equal	
I.S.	Yes	1.000	[0.999 – 1.000]	Yes	-0.009	[-0.213 – 0.219]	Yes	0.099	[-0.310 – 0.293]	Yes	Yes
E.S	Yes	1.000	[1.000 – 1.000]	Yes	-0.553	[-0.218 – 0.222]	No	0.472	[-0.339 – 0.300]	No	No
S.S.	Yes	1.000	[1.000 – 1.000]	Yes	-0.580	[-0.220 – 0.228]	No	0.401	[-0.313 – 0.285]	No	No
QCL	Yes	1.000	[0.999 – 1.000]	Yes	-0.496	[-0.214 – 0.223]	No	0.189	[-0.291 – 0.262]	Yes	No
QoL	Yes	1.000	[0.991 – 1.000]	Yes	-0.317	[-0.227 – 0.224]	No	0.433	[-0.374 – 0.342]	No	No
ID	Yes	0.999	[0.995 – 1.000]	Yes	-0.323	[-0.220 -0.224]	No	0.297	[-0.338 – 0.306]	Yes	No

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WOM	Yes	0.999	[0.999 – 1.000]	Yes	-0.574	[-0.219 - 0.216]	No	0.408	[-0.277 – 0.256]	No	No

After confirming the existence of invariance, the next step is to apply the multigroup analysis using the nonparametric methods of Henseler's MGA and the permutation test. Henseler's MGA directly compares group-specific bootstrap estimates from each bootstrap sample. According to this method, a p value of differences between path coefficients lower than 0.05 or higher than 0.95 indicates a 5% level of significant differences between specific path coefficients across groups (Henseler et al., 2009). On the other hand, permutation tests examined differences in the weights of the indicators used to measure each construct as well as the relationships among the constructs across the groups.

Table 5 shows the results of both methods. Both methods of multigroup analysis used confirm the significance of the results for differences between male and female students in the influence of installation satisfaction on education and social satisfaction, and the impact of QCL on identification and WoM. The effects of installation satisfaction on education and social satisfaction was much higher for male than female students. In the same way, the effects of QCL on Identification and WoM was lower for female than for male students.

Table 5. Results of Multigroup Analysis

Relationships	**Path Coeficient**		**Confidence Interval (95%)**		**Path Coefficient Difference**	**p-Value Difference (One-Tailed)**	
	Male	**Female**	**Male**	**Female**		**Henseler´s MGA**	**Permutation Test**
I.S.→ E.S.	0.643**	0.444**	[0.518, 0.758]	[0.283, 0.588]	0,198	**0,022**	**0,043**
I.S. → S.S.	0.653**	0.404**	[0.515, 0.770]	[0.252, 0.547]	0,249	**0,007**	**0,016**
E.S. → QCL	0.482**	0.446**	[0.236, 0.694]	[0.257, 0.617]	0,036	0,398	0,423
S.S. → QCL	0.298**	0.176	[0.083, 0.539]	[-0.002, 0.363]	0,122	0,206	0,200
QCL → QoL	0.427**	0.371**	[0.243, 0.602]	[0.229, 0.520]	0,056	0,315	0,345
QCL → ID.	0.616**	0.425**	[0.453, 0.758]	[0.279, 0.572]	0,191	**0,039**	**0,044**
QCL → Wom	0.764**	0.543**	[0.657, 0.850]	[0.392, 0.677]	0,221	**0,004**	**0,006**

5. Conclusions

'Understanding the complexities of a students' quality of life has become essential in order for universities to plan their spending most efficiently' (Arslan and Akkas, 2014, p. 870). For the university, it is important to build a reputation to attract candidates - potential students – such that they

enroll. It is crucial to the university to improve its Quality of College Life (QCL) and, as a result, loyalty. At the same time, this contributed to building a positive image of the university through students' identification with the university and positive word of mouth (WoM). The results of this study have showed that students' perception of the QCL is greatly dependent on gender. The effect of all college service on QCL and their influence on Quality of Life (QoL), Identification and WoM, is higher for male than for female students. Based on the research made by Arslan and Akkas (2014, p. 869) '(…) university administrators can primarily focus on improving the social satisfaction of the students then improve facilities and services, in order to raise academic satisfaction levels'. The results of our study have precisely confirmed the aforementioned statement. In addition, it has been proved that - in the activities undertaken by the university – gender should be taken into account.

This study is useful for students as well as for the college. As a result of this research and the regular assessment conducted by the university on student satisfaction, the students may have a more positive perception of the quality that the university offers, based on installations, education and social aspects. This in turn enhances perception of QCL and, finally, QoL.

The results of this research may also be used by the university administration to help assess student satisfaction with academic programs and other university programs and services, and improve QCL as perceived by the students, while also strengthening their loyalty by differentiating university activities based on gender. Thanks to these actions, the reputation of the university will improve along with its appeal in the eyes of potential students. This will strengthen the university's position within a competitive market.

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