

ASSESSING PSYCHOMETRIC PROPERTIES OF SERVQUAL AND EVALUATION OF STUDENTS' SATISFACTION IN KING ABDULAZIZ UNIVERSITY

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ABSTRACT: Being the main stakeholders in any educational setup students' perceptions should weigh the most in framing the policies of the setup. Current research focuses on the psychometric properties of the research instrument, which is used for measuring the students' satisfaction vis-à-vis the SERVQUALs rendered by King Abdulaziz University (KAU), Jeddah. The instrument used for measuring students' satisfaction consisted of five dimensions of SERVQUAL—tangibles, reliability, responsiveness, assurance and empathy. Furthermore, individual effect of five dimensions on students' satisfaction is also evaluated. Secondary data of 508 students from the university's website, using a random sampling technique, was selected for the analysis of the present study. Psychometric properties of the instrument were assessed through Confirmatory Factor Analysis (CFA) using AMOS software. Relation of five dimensions of SERVQUALs on itself and the direct impact of five dimensions of SERVQUAL on Students Satisfaction is evaluated using multiple correlation and regression techniques by employing AMOS and SPSS. Keeping in view the results of CFA one item of Tangibles was eliminated based on low factor loading and as suggested by modification indices rest all the dimensions with their respective items were retained. As regards the evaluation of the students' satisfaction, the results reveal that students are to some extent satisfied regarding the services provided by KAU. Tangibles had the strongest impact on the students' satisfaction followed by Empathy and the dimension having the least impact was Responsiveness. University policy makers can use outcomes of the present study as guidelines to focus exactly where it matters the most for the students' welfare. The study briefly discusses recommendations, limitations and directions for future research in conclusion.

Keywords: SERVQUAL, Students' satisfaction, psychometric properties, confirmatory factor analysis

1. INTRODUCTION

The need for continuous improvement and higher quality is likely to remain as a permanent feature of any organization to sustain in a competitive environment and education institutions are no exception to it. Quality, cost and efficiency have always been three major special focal points for the management of Higher Educational Institutions (HEIs) but of these three, quality received much attention and is being investigated more because it is believed that cost and productivity are influenced by the quality factor, that is as the quality improves, the costs are reduced and productivity increases [31]. Of all the stakeholders involved in the HEIs students are the most important category and HEIs should strive to deliver value to this stakeholder category. The identification of students as stakeholders was introduced by [35] and its importance is growing since then. HEIs need to identify the needs and demands of students who are considered as customers and customer satisfaction is related to quality service [29]. At present, due to a highly competitive environment in the higher education sector, quality departments are tasked with developing quality management programs to survey and estimate student perception regarding the quality of services provided [21]. The first academics to exclusively work on service quality was [10] and before that [17] conceptualized service quality as comprised of three dimensions: physical quality; interactive quality, and corporate quality. Later [25] identified ten dimensions of service quality, which were presented together with a model of service quality but in 1988 the same authors after thorough research suggested five

dimensions instead of ten. The five final components as proposed by [26] are summarized as under:

- *Tangibles: physical facilities, equipment and appearance of personnel;*
- *Reliability: ability to perform the promised service dependability and accurately;*
- *Responsiveness: willingness to help customers and provide prompt service;*
- *Assurance: knowledge and courtesy of employees and their ability to inspire trust and confidence*
- *Empathy: caring, individualized attention that a firm provides to its customers*

The model with five dimensions as aforementioned is called SERVQUAL model and is most commonly used for assessing quality of service in HEIs. [33] adapted the SERVQUAL for an educational setting studying the perceptions of international students in US business schools. The results of the study highlighted that tangibles and assurance are the two most important factors in their assessment of educational service quality. [20] studied service quality in higher education and found that the tangibles dimension was the most important dimension, whereas empathy and assurance were least important. [34] applied SERVQUAL on private universities and colleges and concluded that tangibility has the highest influence on Students' Satisfaction followed by empathy. [28] investigated the extent of satisfaction of students enrolled into international qualifications in Jordan but the scope of the study encompassed school students. However, several studies on service quality have been undertaken in western setting

and far eastern regions in HEIs but the authors have found very few studies carried out in the education sector in Saudi Arabia from the service quality components' point of view. SERVQUAL has been applied in Saudi Arabia but mainly focused on health care institutions and banking sectors for more details see [1],[8] and [12]. Structural equation modeling methodology has been used in research contributions worldwide. For instance, [23] used SEM to investigate the relationship between university learning approaches in mathematics and the dimensions of students' reflective thinking and academic achievement in their first year of university. The study revealed that there is a statistically significant relationship between learning approaches and academic achievement. In contrast,[7] utilized SEM to study the relationship between curriculum expertise and learning approaches and they concluded that there is not enough statistical evidence to support the existence of the relationship between learning approaches and academic achievement. [24] conducted studies which consider SEM to examine the causal relationship between learning approaches, beliefs of self-efficiency, and stages of reflective thinking and academic achievement for university second year students who enrolled in the educational psychology course in different Asian universities. The study indicated that there is no statistically significant relationship between learning approaches and academic achievement. .

Recently, [2] implemented SEM to study the relationship between behavior of anti-productivity work among teachers in Oman.

1.1. Research Objectives:

Based on the literature review four research objectives are framed for the current study:

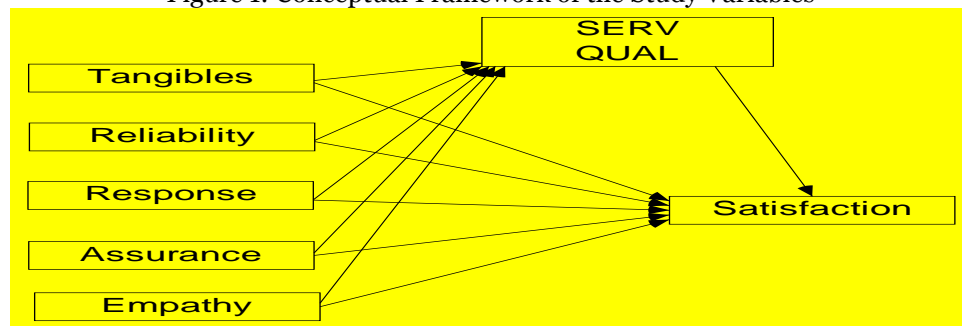
- a. to assess the psychometric properties of the research instrument.
- b. to evaluate Students' satisfaction vis-à-vis student services.
- c. to put forth concrete recommendations and suggestions for improving the students' services based on the research outcomes.

Research objective 'a' will be assessed using confirmatory factor analysis (CFA) statistical technique using SEM whereas objectives 'b' will be evaluated using multiple correlation and regression techniques embedded in the SEM model. Objective 'c' is theoretical in nature and will be extracted from the findings of the study.

1.2. Conceptual Framework:

Three sets of study variables are considered in the current study a) five dimensions of SERVQUAL b) SERVQUAL itself and c) students' satisfaction. Figures 1, exhibit the conceptual framework of the hypothesized relations among the study variables. Same relations will be analyzed using SEM

Figure 1: Conceptual Framework of the Study Variables



Rest of the paper is organized as follows: Section 2 discusses methods and materials; Section 3 deliberates on the results of the study; Section 4 briefly concludes the study with some limitation and future implications.

2. METHODS AND MATERIAL

This study is designed to assess service quality in King Abdulaziz University and gain better understanding of the student's satisfaction toward the service quality in the University. Thus, a cross-sectional quantitative research perspective is adopted. The target population mainly is all students of the King Abdulaziz University, Jeddah, Saudi Arabia

2.1. Instrument

The study questionnaire consisted of three parts; the first part explained the purpose of the study. The second part included some demographic information about the participants including the academic level, both the college and the department at which the participants are enrolled,

the overall GPA, and gender. The third part consisted of questions used to measure the dependent variable, which is the level of satisfaction of participants toward student services provided by KAU, and the study dimensions, which include tangibles, reliability, responsiveness, assurance, empathy, and the quality of student service. The third part of the questionnaire is attached in Appendix. On the one hand, we used the statements (Excellent, Very Good, Good, Acceptable, Weak) for each entry in the questionnaire associated with measuring the study dimensions and we used the five-point Likert scale developed by [18] to measure the responses using the values (5, 4, 3, 2, 1), respectively and an additional response of zero if the statement was not applicable (NA). On the contrary, we used the statements (Strongly satisfied, satisfied, satisfied to some extent, dissatisfied, Strongly dissatisfied) for assessing satisfaction of students toward KAU's student services and we again used the five-

point Likert scale to measure the responses using the values (5, 4, 3, 2, 1), respectively.

2.2. Data Collection/ Analysis

Secondary data was collected from the website of the KAU for 508 students. For convenience of the students Arabic version is used for collection of data. For the analysis of the collected data two software were used SPSS and AMOS.

3. RESULTS

3.1. Sampling characteristics

Table 1 presents the sampling characteristics of the respondents. More than two-thirds of the respondents are females. The biggest chunk of data comes from undergraduate (internal) students and the smallest part of the data comes from Undergraduate (external) who is not regularly studying on the campus. Disparity in the percentage of gender and academic stratum points towards a little unrepresentativeness of the data.

Academic stratum	Male	Female	Total	(%)
Preparatory Year	28	99	127	25.00%
Undergraduate (Internal)	97	139	236	46.46%
Undergraduate (External)	10	8	18	3.54%
Distance Education	5	22	27	5.31%
Graduate Studies	21	79	100	19.69%
Total	161(32%)	347(68%)	508	100%

Table 1: Sampling Characteristics of the Respondents

3.2. SEM Results

a. Confirmatory Factor Analysis

Both Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) are powerful tools for assessing whether a set of scales assess a particular set of scales but CFA has an added advantage to quantify the goodness of fit of the resulting structure. Moreover, EFA is data driven whereas, CFA is theory driven i.e. the structure of the scale understudy has already been deliberated in the previous studies. Since the SERVQUAL has been discussed in the previous studies see literature review therefore, CFA was chosen as appropriated measure to assess the scale and study the goodness of fit. Now the question arises what are the appropriate indices to assess CFA results, though Chi-Square remains the most popular fit statistic there exist a number of severe limitations one of which is its sensitiveness to sample size [13]. Due to the restrictiveness of the Chi-Square, researchers have sought alternative indices to assess model fit [14]). The main criteria used in the current study to judge model fit included goodness of fit (GFI) created by [16], [3] comparative fit index (CFI) and the root mean square error of approximation (RMSEA) developed by [30].Regarding GFI an omnibus cut-off point of 0.90 has been recommended but for CFI [15] suggested a cut-off point ≥ 0.90 as indicative of a good fit. For RMSEA a cut-off value close to 0.06 [15] or a strict upper limit of 0.07 suggested by [32] appears to be

consensus amongst authorities in this field of study. One of the greatest advantages of RMSEA is its ability for a confidence interval to be calculated around its value [19]. It is generally reported in conjunction with RMSEA and in a well-fitting model, the lower limit is close to zero while the upper limit should be less than 0.08. For more on model fit guidelines see [14]

Results of Confirmatory factor analysis for the SERVQUAL scale are shown in Figure 2 and model fit statistics are presented in Table 2. Looking at the Chi-square value for Model with full items it is evident that the model does not fit the data well so the other recourse is to look at the modification indices to improve the model. According to [11], an acceptable factor loading value is more than 0.5 and when it is equal to 0.7 and above it is considered good for one indicator. So keeping in view the results of modification indices, factor loading values and guidelines of [11] item # 2 from Tangibility was dropped. Results from a CFA of the revised scales are exhibited in the second row of Table 2. Though the results are still not promising but keeping in view the cut-off points discussed in the foregoing paragraph and looking at the values of three indices, GFI,CFI and RMSEA together with the values of model selection information criteria AIC,BCC,BIC and CAIC (being decreased) it is suggested that model fit is at an acceptable level.

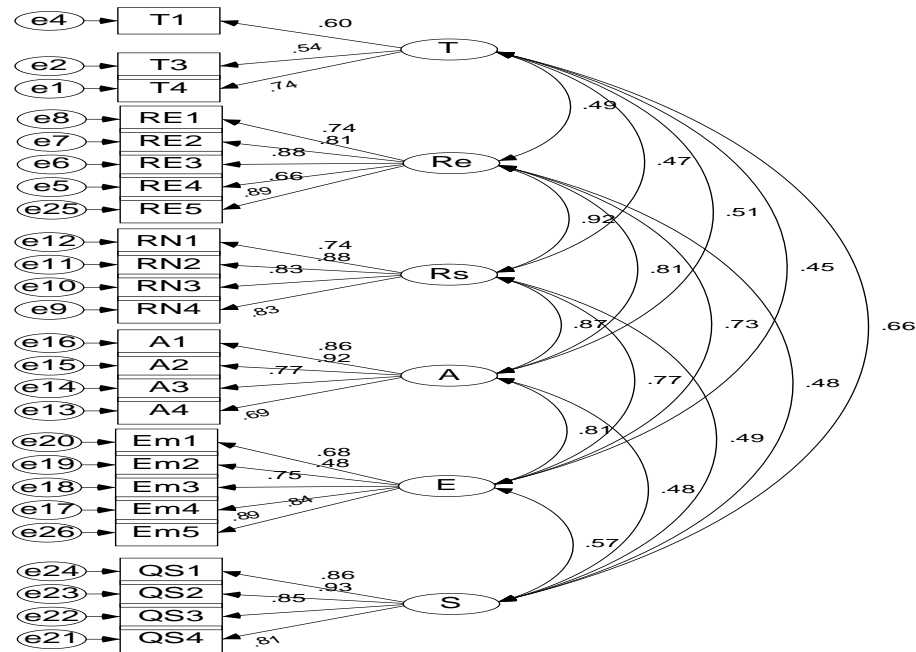


Figure 2: Confirmatory Factor Analysis

T = tangibility, Re = reliability, Rs = responsiveness, a = assurance, S= service quality

Table 2: Fit Statistics and Model Selection Criteria for Measurement Models of SERVQUAL

Model (CFA)	χ^2/df	GFI	CFI	RMSEA	AIC	BCC	BIC	CAIC
Full items	2.473	0.899	0.953	0.054	836.312	843.850	1119.755	1186.755
				(0.049-0.059)				
Revised	2.601	0.900	0.954	0.056	806.310	813.337	1081.291	1146.291
				(0.051-0.061)				

b. Reliability and Validity

Reliability is essentially a synonym for consistency [5]. The most common measure of consistency is Cronbach’s Alpha coefficient [6]. A large coefficient α ($\alpha > 0.70$) is an indication of strong item homogeneity and suggests that sampling sphere has been adequately captured [22]. Reliability is also called internal consistency; it is a measure of how well the scale is actually measuring what it is intended to measure. The inter-item consistency of the five sub scales and Students’ satisfaction are presented in Table 3. The Coefficients α ranged from (0.689 - 0.922) for the revised scales which is an evidence of strong item homogeneity meaning thereby, that the retained items measure the same constructs, thus providing supportive evidence of construct validity. [4] proposed two ways to assess the construct validity of a test: a) Convergent validity, which is the degree

of confidence that a trait is well measured by its indicators b) Discriminant validity, which is the degree to which measures of different traits are unrelated. According to the criterion, of [9] the convergent validity of the measurement model can be assessed by the *Average Variance Extracted (AVE)* and *Composite Reliability (CR)*. The level of CR can also be used to assess convergent validity. According to [11], the acceptable value of CR is 0.7 and above.. AVE measures the level of variance captured by a construct versus the level due to measurement error, values above 0.7 are considered very good, whereas, the level of 0.5 and above is acceptable [11]. CR is a less biased estimate of reliability than Cronbach’s Alpha, the acceptable value of CR is 0.7 and above. AVE and CR are calculated using equations (1) and (2) the results are displayed alongside Cronbach’s α in Table 3.

Table3: Coefficient ‘α’ values for revised SERVQUAL scale

Scale	Items	Cronbach’s ‘α’	CR	AVE
Tangibility	3	0.700	0.690	0.49
Reliability	5	0.893	0.899	0.71
Responsiveness	4	0.896	0.896	0.70
Assurance	4	0.897	0.886	0.81
Empathy	5	0.846	0.855	0.74
Service Quality	4	0.922	0.921	0.74

$$AVE = \frac{\sum \lambda^2}{n} = \frac{\text{sum of squares of the factor loadings}}{n} \tag{1}$$

$$CR = \frac{(\sum \lambda)^2}{(\sum \lambda)^2 + (\sum (1 - \lambda^2))} \tag{2}$$

CR values range from (0.69 to 0.921) which according to Hair et al., (2010) are satisfactory as regards AVE except for Tangibility all the other sub scales exceed the acceptable limit of 0.5.Hence the convergent validity of the SERVQUAL is satisfactory. [9] state that to check the discriminate validity, the level of square root of AVE should be greater than the correlations involving the constructs. In Table 4 the square root of AVE for each subscale is shown in the last columns along with the correlation coefficients for each construct in the relevant rows and columns. For the three subscales of reliability, response and assurance there are little disputes. However, the difference is too small, each with 0.046, 0.062 and 0.004 respectively, and can be ignored [27]. Overall, discriminant validity can be accepted for this measurement model and supports the discriminant validity between the subscales.

c. *Five Dimensions and Students’ Satisfaction*

Figure 3 presents the relation between five dimensions of SERVQUAL with students’ satisfaction. Standardized coefficient betas are used to study the strength of the relationship. Tangibility is having the highest impact on students’ satisfaction followed by empathy and then reliability and assurance the dimension having the least impact is responsiveness. Curved arrows from and to the dimensions are the correlations between the five dimensions all the correlations are highly significant as can be seen in Table 4 the figures differ slightly reason being the difference in estimating procedures of both techniques. Indices in Table 5 are used to discuss the model fitting of the structural model shown in Figure 3. Though the model fit is not up to the mark as Chi-square value is rejected at p =0.01 so the other option is to consider the goodness of fit indices. All the three indices considered for the present study GFI, CFI and RMSEA are within the acceptable limits as discussed in the sub-para (3.2) hence, it can be concluded that the structural model in Figure 3 fits the data well.

Table 4: Showing Correlations and AVE

		SQ	Tang	Rel	Resp	Assur	\sqrt{AVE}
SQ	r	1					0.860
Tangibles	r	.577**	1				0.700
Reliability	r	.888**	.374**	1			0.842
Response	r	.902**	.354**	.835**	1		0.840
Assurance	r	.904**	.401**	.759**	.794**	1	0.900
Empathy	r	.833**	.354**	.651**	.687**	.725**	0.860

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

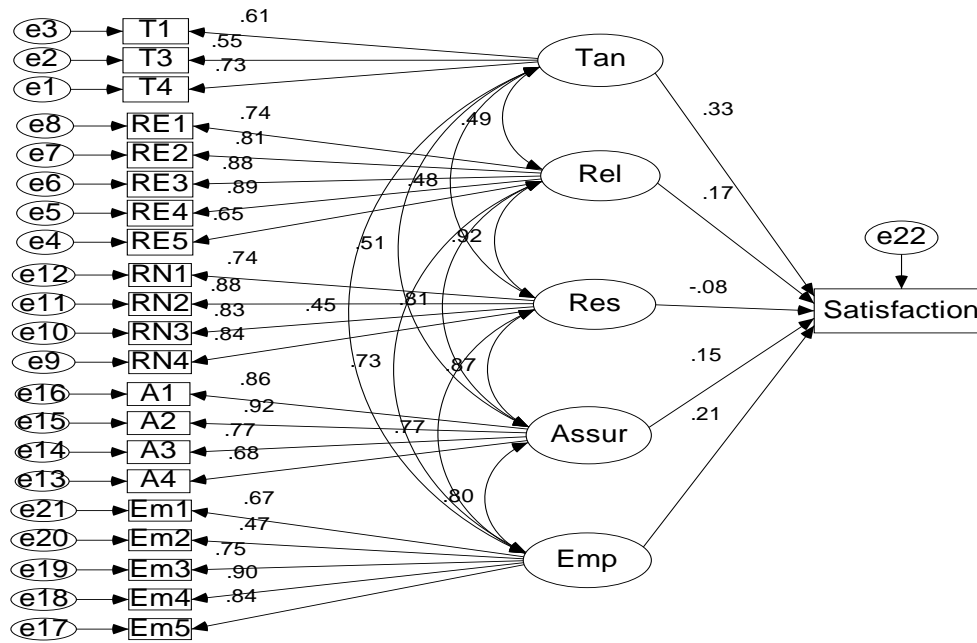


Figure 3: Five Dimensions and Students’ Satisfaction

Table 5: Fit Statistics of Five Dimensions of SERVQUAL & Students’ Satisfaction

Model	χ^2/df	GFI	CFI	RMSEA
Five dimensions impact on Students’ Satisfaction	2.704 (0.000)	0.911	0.955	0.056 (0.052-0.064)

d. Full Structural Model

Full structural model of all the study variables in presented in Figure 4. It shows the impact of the five dimensions of SERVQUAL on SERVQUAL itself and the impact of SERVQUAL on Students’ Satisfaction. Students’ Satisfaction was measured through a single item and used as a measure of Overall satisfaction of the students’ vis-à-vis the quality of services rendered by King Abdulaziz University. The results shown in Figure 4 depicts that SERVQUAL has a big impact on Students’ Satisfaction, as the magnitude of standardized regression beta between the variables is 0.64. As regards the dimensions, Tangibility is having the highest impact on

SERVQUAL followed by empathy rest three dimensions do not have a considerable impact on SERVQUAL. Results in Table 6 are used for assessing the goodness of fit of the full structural model since the value of Chi-square is significant which points towards the fact that model does not fit as well as it should have been . The values of three goodness of fit indices are within the acceptable limits as discussed in sub-sub- para (3.2) hence, it can be safely concluded that full structural model in Figure 4 adequately fits the data.

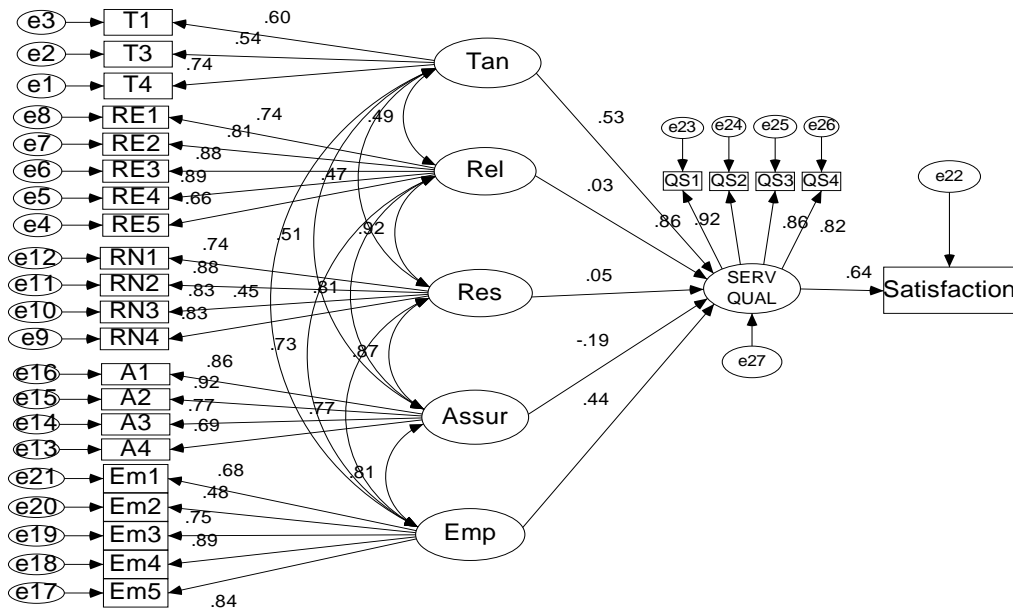


Figure 4: Full Structural Model of the Study Variables

Table 6: Fit Statistics of Full Structural Model

Model	χ^2/df	GFI	CFI	RMSEA
Full Structural Model	2.771 (0.000)	0.89	0.947	0.059 (0.054-0.064)

4. CONCLUSION:

The current study provides evidence concerning the psychometric properties of the SERVQUAL questionnaire using data of students from King Abdulaziz University. The instrument exhibited a five-factor structure for the construct of SERVQUAL, satisfactory reliability and validity, and somewhat appropriate relationships with students’ rating of their overall satisfaction with the SERVQUAL. The results reveal that Tangibility has the highest impact on students’ satisfaction followed by Empathy. The findings of the current match the findings of [34] the authors applied SERVQUAL on private universities and colleges and concluded that tangibility has the highest influence on Students’ Satisfaction followed by empathy. Keeping in view the findings of the study it is suggested that university administration in order to enhance the students’ satisfaction should focus more on reliability, responsiveness and assurance while maintaining the tangibility and empathy dimension. Future research needs to look into the contingency framework with Gender, Faculties and Semesters working as moderators between the linkage of SERVQUAL and students’ satisfaction. Moreover, in future studies equal representation of all demographic characteristics may also be looked into for generalizing the results of the study.

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REFERENCES

1. Al-Borie HM1, Damanhour AM Patients' satisfaction of service quality in Saudi hospitals: a SERVQUAL analysis. *Int J Health Care Qual Assur.* 2013;26(1):20-30
2. Al-Mahdi, Y. F., Alkiomih, A., & Almazroyah, A. (2015). Structural equation model for anti-productivity work attitudes of teachers: practical usage and procedures to overcome them from the perspective of schools principals in Muscat (in Arabic). *The Jordanian Journal of Educational Sciences*, 11(1), 61-72.
3. Bentler, P.M. (1990), "Comparative Fit Indexes in Structural Models," *Psychological Bulletin*, 107 (2), 238-46.
4. Campbell, D. T. & Fiske, D. W. (1959) Convergent and discriminant validation by the Multitrait-multimethod matrix. *Psychological bulletin*, 56-81
5. Cohen, L., Manion, L., & Morrison, K.(2001). *Research methods in education* (5th ed.).London: Routledge-Falmer.
6. Cronbach, L.J.(1951).Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334, doi: 10.1007/BF02310555.

7. Diseth, A., Pallesen, S., Hovland, A., & Larsen, S. (2006). Course experience, approaches to learning and academic achievement. *Education & Training*, 48, 156- 169.
8. Fraihi, K. J. A., FAMCO, D., FAMCO, F., & Latif, S. A. (2016). Evaluation of outpatient service quality in Eastern Saudi Arabia: Patient's expectations and perceptions. *Saudi Medical Journal*, 37(4), 420–428. <http://doi.org/10.15537/smj.2016.4.14835>
9. Fornell, C., & Larcker, D. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 39-50. doi:10.2307/3151312
10. Grönroos C., 1984. "A service quality model and its marketing implications," *European Journal of Marketing*, Vol. 18, No. 4, pp. 36 - 44
11. Hair, J. F., Black, W. C., Balin, B. j., & Anderson, R. E. (2010). *Multivariate data analysis: Maxwell Macmillan International Editions*.
12. Hanan Saidi, Sara Al Dosari (2017) "An evaluation of Service Quality in Saudi Banks by SERVQUAL" *World Wide Journal of Multidisciplinary Research and Development WWJMRD* 2017; 3(1): 61-67 e-ISSN: 2454-6615
13. Hinkin, T. R., Tracey, J. B., & Enz, C. A. (1997). Scale construction: Developing reliable and valid measurement instruments. *Journal of Hospitality and Tourism Research*, 21(1), 100–121.
14. Hooper, D., Coughlan, J. and Mullen, M. R (2008). "Structural Equation Modelling: Guidelines for Determining Model Fit." *The Electronic Journal of Business Research Methods* Volume 6 (1), pp. 53 - 60, available online at www.ejbrm.com
15. Hu, L.T. and Bentler, P.M. (1999), "Cutoff Criteria for Fit Indexes in Covariance Structure Analysis: Conventional Criteria Versus New Alternatives," *Structural Equation Modeling*, 6 (1), 1-55
16. Jöreskog, K. and Sörbom, D. (1996), *LISREL 8: User's Reference Guide*. Chicago, IL: Scientific Software International Inc.
17. Lehtinen U., Lehtinen J. R., 1982. "Service Quality: A Study of Quality Dimensions," *Service Management Institute, Helsinki*
18. Likert, R. (1932). A technique for the measurement of attitudes. *Archives of Psychology*, 22 140, 55.
19. MacCallum, R.C., Browne, M.W., and Sugawara, H., M. (1996), "Power Analysis and Determination of Sample Size for Covariance Structure Modeling," *Psychological Methods*, 1 (2), 130-49.
20. Mohamad Yosuf AR, Hassan Z, Abdul Rahman S, et al.(2012) "Educational service quality at public higher educational institutions: A proposed framework and importance of the sub-dimensions". *International Journal of Economics Business and Management Studies*.. 1(2): 36-49.
21. Naglaa A EIS_1, Rehab GH, Ahlam E A (2018)Undergraduate nursing students' perceptions of educational service quality at Alexandria University, Egypt" *Journal of Nursing Education and Practice* 2018, Vol. 8, No. 1 <https://doi.org/10.5430/jnep.v8n1p37>
22. Nunnally, J.C. (1978). *Psychometric theory* (2nd ed.).New York: McGraw-Hill.
23. Phan, H. P. (2006). An Examination of student learning approaches, reflective thinking and epistemological beliefs: A latent variables approach. *Journal of Research Educational Psychology*, 4(3), 577–610.
24. Phan, H. P. (2007). An Examination of reflective thinking, learning approaches, and self-efficacy beliefs at the university of the south pacific: A path analysis approach. *Educational Psychology*, 27(6), 789–806.
25. Parasuraman A., Zeithaml V.A., Berry L.L., 1985. A conceptual model of service quality and its implications for future research, *Journal of Marketing*, Vol. 49, No. 3, pp. 41-50
26. Parasuraman A., Berry L. L., Zeithaml V.A., 1988. SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality, *Journal of Retailing*, Vol. 64, No. 1, pp. 12-40
27. Rahim MA, Magner NR 1995 *J. Appl. Psychol.* 80 122-32
28. Rateb S, Hannah D , Firas I MS , Taghrid S , Samer E D (2016) " Assessing service quality in secondary schools: the case of Jordan" . *Benchmarking: An International Journal*, Volume: 23 Issue: 5
29. S.Donlagice, S. Fazlie (2015) "Quality Assessment in higher education using the SERVQUAL model" *Management*, Vol 20 (1), pp-39-57
30. Steiger, J.H. (1990), "Structural model evaluation and modification," *Multivariate Behavioral Research*, 25, 214-12
31. Samoel, K, (2001), "Comprehensive quality management, integrated approach". Tehran: Daneshkar
32. Steiger, J.H. (2007), "Understanding the limitations of global fit assessment in structural equation modeling," *Personality and Individual Differences*, 42 (5), 893-98.
33. Tomovick C., Jones S., Al-Khatip J., Baradwaj B.G., 1996. An assessment of the service quality provided to foreign students at U.S. business school, *Journal of Education for Business*, No. 70, pp. 130-137
34. Vaz, A. & Mansori, S. (2013), "Malaysian Private Education Quality: Application of SERVQUAL Model", *International Education Studies* , 6(4)
35. Douglas, J., Mc Clelland, R. ,& Davies J. (1993). "The development of a conceptual model of student satisfaction with their experience in higher education" *Quality Assurance in Education*, 16-(1), 19-35

Appendix

The Quality Services of Student at KAU

Tangibles	W	A	G	VG	Ex	NA
1. New and updated facilities and equipment (laboratories, display ...)						
2. The facilities of the University are attractive (buildings, classrooms,).						
3. Formal clothing for employees and workers.						
4. Educational materials are available and updated (educational programs, books,).						
Reliability (RE)						
1. To perform tasks or fulfill the promised services.						
2. Employees have the competence and ability to solve students' problems.						
3. Meet and perform tasks and services from the first encounter.						
4. Provide the service on time.						
5. Save files and educational records for students.						
Responsiveness (RN)						
1. Inform students of the time to receive the service.						
2. Provide students with services on time without any delay.						
3. Staff is ready to help students.						
4. Employees have powers to respond to students' needs.						
Assurance (A)						
1. Building confidence in students (ensuring students in staff).						
2. Feel safe and relaxed when dealing with employees.						
3. Staff respects students.						
4. Efficient and experienced staff to answer students' questions and needs.						
Empathy (E)						
1. Individual attention to each student.						
2. Working hours are suitable for students						
3. Meet students with compassion and patience.						
4. Employees are interested in the success and achievements of students.						
5. Employees understand the needs of private students						
The Quality Service of Student						
1. The University offers distinguished services						
2. The University offers high quality services in various aspects						
3. University service levels are very high						
4. The quality of service at university is very high						
Student Satisfaction	SD	D	FWB	S	SS	
Are you satisfied with the quality of student services?						