



# HEDPERF: A Multi-item Scale for Measuring Students Perception of Service Quality

Dr. Pooja

Assistant Professor of Commerce, Govt. SPMR College of Commerce, Cluster University of Jammu,

Jammu-180001

Jammu and Kashmir (UT), India

[pookiran@gmail.com](mailto:pookiran@gmail.com)

**Abstract—** A constant research and analysis of education service quality is of utmost priority for improving and maintaining originality and accuracy in educational system. Students' satisfaction as a multidimensional construct influenced by numerous variables such as non-academic aspects, academic aspects, reputation, access, programme issues, this paper seeks to assess their perceptions of service quality in the new environment based on a modified higher education service quality (HEDPERF) instrument to measure the aforesaid five constructs. The respondents' views towards five dimensions of service quality in higher education namely "academic aspects", "reputation", "non-academic aspects", "access", and "programme issues" (Abduallah, 2006a) were collected on a seven – point Likert scale (1 = strongly disagree, 7 =strongly agree). Cronbach's Alpha method and squared multiple correlations were used to demonstrate the internal consistency of scale items. The analysis started with descriptive analysis followed by factor and reliability analyses. One-way ANOVA and Levene's test has been used to measure the significant mean differences across five groups of respondent i.e., B.Com, B.Com (Hon's), BCA, BBA and M.Com with respect to academic, reputation and access related dimensions of HEDPERF scale. This paper uncovered course-wise significant effect indicated by values of F-ratio for academic dimension "Sufficient and convenient consultation",

Professional appearance/image as part of reputation dimension and "Counseling service" as part of access dimension was found 2.603, 5.051 and 2.969 respectively with its significant indications that likelihood of an F-ratio the size of the one obtained occurring by chance that's only a 0.210 (21% chance).

**Keywords:** Higher Education, HEdPERF scale, students' perception, service quality satisfaction

## I. INTRODUCTION

Globalization and development in technology is now affecting almost all today (Ada et al., 2017) all countries of the world today. Constant and consistent adaptability to such changes requires condensed efforts. On the way towards adapting all current changes, the universities and colleges of course occupy the first place. For bringing about this change, quality has been discussed with immense emphasis among higher education institutions. In order to ensure retention of students in such prestigious institutions, identification and evaluation of students' satisfaction in terms of their level of interest and performance need investigation by the educational institution. Assessing of service quality not only helps higher educational institutions in becoming competitive but also ensures success and sustainability in them (Raju et al., 2017).

Since education has become the primary determinants of standard of living, employment status and socio-economic development, enhancing

quality of education is regarded as key invisible factor. This paper aims to identify the level of importance or expectation of students (Adinegara et al., 2016) through investigating service quality and performance of higher education institutions. Higher education service quality can provide overall climate & culture for change through decision-making system, operating system and human resource practices. This research is of immense importance to bring about change, development, betterment and the progress not only in individuals, institutions, society but also in the nation as a whole.

## **II. Need of the Study**

Due to ongoing advancements in teaching learning process, it's very important to maintain and sustain consistent efforts by the organization to provide better services to students and continually upgrade and evaluate the nature and extent of services provided to the students. This research is a part of consistent efforts of the teachers to evaluate and improve accordingly the service quality satisfaction encompassing all the five dimensions "academic aspects", "reputation", "non-academic aspects", "access", and "programme issues" under study.

## **III. Review of Related Literature and Hypotheses Formulation**

Attempt has been made to provide overview of various aspects of this study through the review of literature.

Azam, A. (2018) investigated the antecedents of student's intention to choose and stay with private higher education institutions. Data collected from using standardised questionnaire from 160 respondents was analysed using Structural Equation Modeling (SEM). The results explained that perceived service quality was positively correlated to satisfaction, perceived service quality and satisfaction was positively correlated to student's retention.

Muhammed, N. et al., (2018) measured the relationship between service quality and students satisfaction using HEdPERF model. Data collected from 384 respondents was analysed using Structural Equation Modeling, Factor analysis and parallel analysis. The results revealed that among five dimensions of service quality academic aspects were ranked as the most important dimension of service quality.

Napitupulu, D. et al., (2018) examined the extent to which the quality of the services affect user satisfaction. 842 students were contacted and the results were analysed using correlation analysis. Using correlations analysis, the gap between perceptions and expectations of 842 respondents was found to be negative (perceptions – expectations) which means perceived performance was far from expected.

Chandra, T. et al., (2018) investigated student satisfaction and loyalty in higher education institutions in Riau. Data collected from 1000 respondents was statistically analysed using SEM and the results revealed positive influence of service quality on student satisfaction. The paper suggested the universities and colleges of Riau to improve and provide better service quality to get student's satisfaction.

Mwiya, B. et al., (2017) aimed to register and regulate universities in order to ensure quality of delivery of service. The primary data was collected from 656 senior final year undergraduate students of public Zambia University. The findings of this paper explained that higher level of perceived good service performance in tangibles, reliability, assurance, empathy and responsiveness to customer's needs would result in higher level of satisfaction.

Ada, Sefer. (2017) evaluated the quality service in higher education in Marmara and Nigde Omer Halisdemir universities department of education students. The responses obtained from 886 university students were tested using t-test and

Anova. From the study of Gender, grade, university, and academic success as personal variables, the considerations of girls were higher than males regarding the academic position and institutional image. Also, the perceptions of 3rd grade students were higher than those of 4th grade students according to academic position, institutional image, offered diploma programs, and physical opportunities. However, there was an overall increase in the academic success of university students across all factors and total scores.

Saleem, S.S (2017) identified the effect of service quality on student's satisfaction with moderating effect of university culture, price and university reputation. Data collected from 747 students was tested using correlation Analysis and Confirmatory Factor Analysis. The study revealed that the association between service quality and student satisfaction was positively strengthened by the university culture and price and university reputation negatively strengthened the relationship.

On the basis of studies reviewed, extant literature scanned and identification of 41 item measurement scale, following objectives and hypotheses are proposed:

**Obj1:** To analyse mean difference in service quality satisfaction towards Academic Performance, Reputation and Access across five courses namely B.Com, B.Com Hon's, BCA, BBA, M.Com in Govt. SPMR College of Commerce.

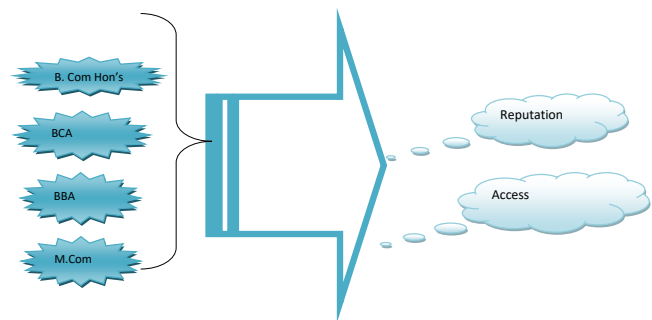
**Hyp0:** There is no significant mean difference in service quality satisfaction towards Academic Performance, Reputation and Access across five courses namely B.Com, B.Com Hon's, BCA, BBA, M.Com in Govt. SPMR College of Commerce.

**Hyp1:** There is significant mean difference in service quality satisfaction towards Academic Performance, Reputation and Access across five courses namely B.Com, B.Com Hon's, BCA, BBA, M.Com in Govt. SPMR College of Commerce.

### Research Framework

The HEdPERF Model or Higher Education Performance Model was introduced by Firdaus Abdullah in 1995 with an aim of capturing the authentic determinants of service quality namely, non-academic aspects, academic aspects, reputation, access, programme issues and understanding within higher education sector. This model has been empirically tested for uni-dimensionality, reliability and validity using both exploratory and confirmatory factor analysis (Abdullah, 2006). This study aims to investigate mean difference in service quality satisfaction towards Academic Performance, Reputation and Access across five courses namely B.Com, B.Com Hon's, BCA, BBA, M.Com in Govt. SPMR College of Commerce.

**Figure 1: Mean Differences in Responses across Courses with Respect to Academic Performance, Reputation and Access dimension.**



### Research Design and Methodology

Research design and methodology covers data collection instrument, nature and sources of information, reliability and validity, research sample and statistical tools.

#### Data Collection Instrument

This study is based on survey design in which Higher Education Performance (HEdPERF) scale has been used as data collection instrument consisting of 41 items. It was constituted by Bektas and Akam (2013) and was based on a scale developed by Abdullah (2006) to measure the quality of service offered to students in higher education. Respondents were asked to rate their

views on the service quality on a seven – point Likert scale (1 = strongly disagree, 7 =strongly agree). The HEDPERF ( Higher Education Performance ) only was developed by Firdaus Abdullah specifically covers strengths and weaknesses of service dimension, namely “academic aspects” , “reputation”, “non-academic aspects”, “access”, “programme issues” and “clear understanding” (Abduallah, 2006a). Later, sixth dimension “understanding” was discarded. In this model first dimension that is “Non-academic aspects” are related to administrative staff to show respect, provide equal treatment, along with confidentiality of information”, “Academic aspects” are related to academicians, the responsibilities of academics. It highlights key points like having positive attitude, having educated and experienced academic staff”, “Reputation includes items in terms of their importance to Higher Education Institution, professional image of the institution”, “Access includes ease of contact, approachability, availability and convenience of academic and non-academic staffs” and “program issues covers related to offering wide range of programs or specialization, counseling service and different quality programs” (Abdullah, 2005).

### **Nature and Sources of Information**

The data has been collected from both primary and secondary sources for necessary information of the study. Primary data based on first on first hand information has been generated from the students of the government SPMR College of Commerce, Jammu through Hedperf Model schedule. Secondary information has been collected from journals, magazines and research papers published and unpublished from internet and was also used to substantiate literature and primary information.

### **Reliability and Validity**

The common accepted measure of internal consistency is Cronbach’s Alpha, the value of

which was found to be 0.70 which is the minimum accepted standard for demonstrating internal consistency (Kennedy et al. 2002).

The overall alpha reliability coefficient (Cronbach’s Alpha) of the scale was determined to be .900 (Table 1) Cronbach’s Alpha values of HEDPERF dimensions ranged from .523 – 8.99. Since the aforesaid values explain high reliability values hence, it is concluded that the Hedperf scale items are internally consistent between the scale items.

### **Research Sample**

This research has been conducted by questionnaire based survey method that was distributed to students of Government SPMR College of Commerce, Jammu. The data was collected from 50 respondents during the year 2019-20 from B.Com (General) (Semester – 6th), B.Com (Hon’s) (Semester – 4th), B.C.A (Semester – 4th), B.B.A (Semester – 4th), M.Com (PG General) (Semester – 2nd and 4th) students using convenience sampling technique. Data was collected by questionnaire that contain six sections, namely, A, B, C, D, E and F. Section A entailed one question belonging to student demographic profile.

Section B entailed thirteen questions belonging to non – academic aspects. Section C entailed nine questions belonging to academic aspects. Section D entailed ten questions belonging to the reputation. Section E entailed seven questions belonging to access of the college and Section F entailed two questions belonging to the program issue. Three items relating to service quality satisfaction were also included in the questionnaire. The questionnaire is composed of 44 items.

### **Statistical Tools**

The data collected with the help of survey method have been assessed and analyzed using SPSS Software (16 version) in order to bring out relevant results with the help of appropriate statistical tools. The descriptive analysis of non-

academic, academic, reputation, access and program issues dimensions have been carried out with the help of mean, standard deviation and frequency distribution. Mean has been used in order to know the value of each observation. Further, standard deviation has been analyzed to work out the amount of variation in the respondent's views (Beri, 2005). Frequency distribution provided much more concise portrayal of the data. The ANOVA or Analysis of variance technique used in the study to measure the significant mean differences across five groups of respondent i.e., B.Com, B.Com (Hon's), BCA, BBA and M.Com (Table 3) with respect to Academic, Reputation and Access related dimensions.

Table 1: Scale Reliabilities and Squared Multiple Correlation

Dimension	Scale reliabilities		Squared Multiple Correlation	Cronbach's Alpha if item deleted
	Cronbach's Alpha	Cronbach's Alpha based on Standardised items		
<b>Non-Academic (13 items)</b>	<b>.826</b>	<b>.825</b>		
▪ Sincere interest in solving problem			.607	.799
▪ Caring and individualized attention			.528	.817
▪ Efficient/prompt dealing with complaints			.551	.801
▪ Responding to request for assistance			.343	.821
▪ Accurate and retrievable records			.366	.819
▪ Promises kept			.614	.814
▪ Convenient opening hours			.443	.823
▪ Positive attitude			.636	.797
▪ Good communication			.369	.818
▪ Knowledgeable of systems/procedures			.544	.811
▪ Feeling secured and confident			.398	.820
▪ Service within reasonable time frame			.467	.819
▪ Confidentiality of information			.246	.827
<b>Academic (09 items)</b>	<b>.857</b>	<b>.860</b>		
▪ Knowledgeable in course content			.413	.843
▪ Caring and courteous staff			.448	.840
▪ Responding to request for assistance			.415	.841
▪ Sincere interest in solving problem			.393	.847
▪ Positive attitude			.599	.833
▪ Good communication			.573	.835
▪ Feedback on progress			.490	.837
▪ Sufficient and convenient consultation			.489	.831
▪ Educated and experience academicians			.339	.865
<b>Reputation (10 items)</b>	<b>.826</b>	<b>.824</b>		
▪ Professional appearance/image			.494	.790
▪ Hostel facilities and equipment			.384	.823
▪ Academic facilities			.474	.804
▪ Internal quality programmes			.598	.796
▪ Recreational facilities			.439	.812
▪ Minimal class sizes			.390	.828
▪ Ideal campus location/layout			.469	.806
▪ Reputable academic programmes			.380	.810
▪ Easily employable graduates			.415	.811
▪ Health services			.398	.817
<b>Access (07 items)</b>	<b>.703</b>	<b>.702</b>		
▪ Equal treatment and respect			.375	.678
▪ Fair amount of freedom			.450	.664
▪ Easily contacted by telephone			.244	.670
▪ Counselling services			.379	.688
▪ Student's union			.418	.631
▪ Feedback for improvement			.361	.682
▪ Service delivery procedures			.376	.666
<b>Program issues (02 items)</b>	<b>.522</b>	<b>.523</b>		
▪ Variety of programmes/specializations			.126	.a
▪ Flexible syllabus and structure			.126	.a
<b>Overall reliability</b>	<b>.900</b>	<b>.899</b>		

### Data Analysis and Interpretation Descriptive Statistics and Brief Profile of Respondents

Table 2 depicts descriptive statistics and brief profile of respondents. The course wise descriptive statistics has been carried out involving five dimensions of HEDPERF scale namely; Non-Academic aspects, Academic aspects, Reputation, Access and Programme Issue. The mean response of the students belonging to B.Com, B.Com (Hon's) BCA, BBA, and M.Com courses towards service quality satisfaction in Higher Education Institution of Government SPMR College of Commerce, Jammu were exhibited on a scale of one (1) to Seven (7).

The first dimension of HEDPERF scale i.e, Non-Academic aspect comprising of 13 items explained above average mean value for "Feeling secured and confident" (5.14), "Sincere interest in solving problem" (5.43), "Service within reasonable time frame" (5.43), "Good communication" (5.57) in BCA course. It showed above average mean value for "Confidentiality of information" (5.29), "Efficient/prompt dealing with complaints" (5.43), "Accurate and retrievable records" (5.43), "Good communication" (5.43), "Feeling secured and confident" (5.71), "Sincere interest in solving problem" (6.00), "Knowledgeable of system/procedures" (6.29), "Positive attitude" (6.57) in BBA course. It showed above average value for "confidentiality of information" (5.11) in M.Com course.

Non-Academic aspect explained below average mean value for "Good communication" (3.00), "Sincere interest in solving problem" (3.38) in B.Com course. It explained below average mean value for "Feeling secured and confident" (3.44), "Service within reasonable time frame" (3.44) in B.Com (Hon's) course. It explained below average mean value for "Caring and individualized attention" (2.58), "Sincere interest in solving problem" (3.00), "Promises kept" (3.00), "Accurate and retrievable records" (3.42), "Efficient/prompt dealing with complaints" (3.47), "Responding to request for assistance" (3.42) in M.Com course.

The second dimension of HEDPERF scale i.e., Academic aspect comprising of 9 items explained above average mean value for “Good communication” (5.22) in B.Com (Hon’s) course. It explained above average mean value for “Knowledgeable in course content” (5.43), “Good communication” (5.43), “Educated and experience academicians” (5.43) in BCA course. It explained above average mean value for “Caring and courteous staff” (5.43), “Positive attitude” (5.71), “Good communication” (5.86), “Knowledgeable in course content” (6.00), “Sufficient and convenient consultation” (6.14), “Educated and experience academicians” (6.14) in BBA course. It explained above average mean value for “Feedback on progress” (5.31), “Knowledgeable in course content” (5.37), “Caring and courteous” (5.58) in M.Com course.

Academic aspect explained below average mean value for “Feedback on progress” (3.44) in B.Com (Hon’s) course.

The third dimension of HEDPERF scale i.e., Reputation aspect comprising of 10 items explained above average mean value for “Recreational facilities” (5.29), “Ideal campus location/layout” (5.43), “Minimal class sizes” (5.57), “Academic facilities” (5.71), “Professional appearance/image” (6.43) in BBA course.

It explained below average mean value for “Health services” (2.33), “Professional appearance/image” (2.89), “Hostel facilities and equipment” (3.11), “Ideal campus location/layout” (3.33), “Internal quality programmes” (3.44) in B.Com (Hon’s) course. It explained below average mean value for “Health services” (2.14), “Ideal campus location/layout” (3.43) in BCA course. It explained below average mean value for “Hostel facilities and equipment” (3.14) in BBA course. It explained below average mean value for “Health services” (2.42), “Hostel facilities and equipment” (2.74) “Ideal campus location/layout” (3.26),

“Easily employable graduates” (3.42), “Recreational facilities” (3.42) in M.Com course.

The fourth dimension of HEDPERF scale i.e., Access aspect comprising of 7 items explained above average mean value for “Service delivery procedure” (5.14), “Equal treatment and respect” (5.43), “Fair amount of freedom” (5.57), “Easily contacted by telephone” (6.14) in BBA course. Access aspect explained average mean value for “Easily contacted by telephone” (3.63), “Equal treatment and respect” (4.25), “Fair amount of freedom” (4.63) in B.Com course.

Access explained below average mean value for “Feedback for improvement” (2.75), “Services delivery procedures” (3.00), “Student’s union” (3.13), “Counseling services” (3.25) in B.Com course. It explained below average mean value for “Service delivery procedures” (3.11) in B.Com (Hon’s) course. It explained below average mean value for “Counseling services” (2.68), “Student’s union” (3.21), “Service delivery.

The fifth dimension of HEDPERF scale i.e., program issues aspect comprising of 2 items explained above average mean value for “Flexible syllabus and structure” (5.43) in BBA course. It explained below average mean value for “Variety of programmes / specializations” (2.95) in M.Com course.

### **Measuring Course-Wise Difference in Academic Performance, Reputation and Access in Govt. SPMR College of Commerce Using ANOVA Test**

One-way ANOVA and Levene’s test has been used to measure the significant mean differences across five groups of respondent i.e., B.Com, B.Com (Hon’s), BCA, BBA and M.Com (Table 3) with respect to Academic, Reputation and Access related dimensions

Table 2: Descriptive Statistics and Brief Profile of Respondents

S.No	Variables	Mean					Standard Deviation					Frequency				
		B.Com	B.Com Hon's	BCA	BBA	M.Com	B.Com	B.Com Hon's	BCA	BBA	M.Com	B.Com	B.Com Hon's	BCA	BBA	M.Com
<b>HEDPERF Dimensions</b>																
<b>01 Non-Academic (13 items)</b>																
	Sincere interest in solving problem	3.38	4.89	5.43	6.00	3.00	1.92	1.45	1.27	1.15	1.67	8	9	7	7	19
	Caring and individualized attention	3.88	4.78	4.14	4.71	2.58	1.46	1.64	1.07	1.60	1.46	8	9	7	7	19
	Efficient/prompt dealing with complaints	3.63	3.89	4.00	5.43	3.47	2.44	1.96	1.53	1.82	1.58	8	9	7	7	19
	Responding to request for assistance	3.50	3.78	4.14	4.57	3.47	1.69	1.56	.899	1.72	1.74	8	9	7	7	19
	Accurate and retrievable records	3.63	3.78	4.71	5.43	3.42	1.51	1.39	1.38	.976	1.71	8	9	7	7	19
	Promises kept	3.75	4.33	4.29	5.00	3.00	1.58	1.50	1.60	1.15	1.56	8	9	7	7	19
	Convenient opening hours	4.13	3.56	4.57	4.86	4.00	1.25	2.13	1.27	1.25	1.80	8	9	7	7	19
	Positive attitude	3.75	4.56	4.43	6.37	4.26	1.58	1.51	1.27	1.35	2.13	8	9	7	7	19
	Good communication	3.00	4.67	3.57	5.43	4.58	1.77	1.66	.787	1.40	1.84	8	9	7	7	19
	Knowledgeable of systems/procedures	4.13	3.89	5.00	6.29	4.74	2.03	1.62	.578	1.11	1.48	8	9	7	7	19
	Feeling secured and confident	4.75	3.44	5.14	5.71	4.74	1.16	1.81	1.07	1.11	1.69	8	9	7	7	19
	Service within reasonable time frame	3.75	3.44	5.43	4.29	3.89	1.67	1.67	.355	1.80	1.76	8	9	7	7	19
	Confidentiality of information	3.75	5.00	4.71	5.29	5.11	1.98	1.32	1.38	1.38	2.11	8	9	7	7	19
<b>02 Academic (09 items)</b>																
	Knowledgeable in course content	4.50	4.89	5.43	6.00	5.37	1.69	1.83	1.27	.817	1.61	8	9	7	7	19
	Caring and courteous staff	4.63	4.78	4.43	5.43	5.58	1.06	2.05	1.40	1.51	1.46	8	9	7	7	19
	Responding to request for assistance	4.25	4.60	4.71	5.00	4.37	1.67	2.00	.931	.377	2.36	8	9	7	7	19
	Sincere interest in solving problem	4.88	4.89	4.14	4.71	4.95	1.73	1.62	1.46	1.60	1.58	8	9	7	7	19
	Positive attitude	4.88	4.23	5.00	5.71	5.58	1.46	1.80	1.53	.951	1.57	8	9	7	7	19
	Good communication	4.63	5.22	5.43	5.86	5.33	2.07	1.20	.335	1.07	1.31	8	9	7	7	19
	Feedback on progress	4.38	3.44	4.29	4.71	5.22	2.36	1.94	1.11	1.80	1.83	8	9	7	7	19
	Sufficient and convenient consultation	3.63	4.00	4.00	6.14	4.95	1.77	1.94	1.73	.889	1.90	8	9	7	7	19
	Educational and experience academics	4.88	4.44	5.43	6.14	5.32	1.64	1.88	1.27	1.46	1.89	8	9	7	7	19
<b>03 Reputation (10 items)</b>																
	Professional appearance/image	2.88	2.89	4.57	6.43	3.74	1.89	1.54	1.90	.787	2.08	8	9	7	7	19
	Hostel facilities and equipment	3.75	3.11	4.00	3.14	2.74	1.16	1.61	1.63	2.12	1.79	8	9	7	7	19
	Academic facilities	3.25	4.33	4.71	5.71	3.68	2.05	2.18	1.38	1.11	1.89	8	9	7	7	19
	Internal quality programmes	2.88	3.44	4.43	4.57	3.95	1.55	1.81	1.27	1.72	1.61	8	9	7	7	19
	Recreational facilities	2.88	3.56	3.71	5.29	3.42	1.46	2.00	1.70	2.06	1.57	8	9	7	7	19
	Minimal class sizes	4.13	4.11	4.57	5.37	4.26	1.13	1.54	1.62	.976	1.97	8	9	7	7	19
	Hostel campus location/layout	3.75	3.23	3.43	3.43	3.26	1.28	1.80	1.90	2.24	1.76	8	9	7	7	19

As per Levene's test, the value of significance was found to be greater 0.05 with respect to academic dimension "Sufficient and convenient consultation", Professional appearance/image as part of Reputation dimension and "Counseling service" as part of Access dimension thereby indicating homogeneity of variances of five groups. The sum of squares and mean squares represent the experimental effect. The experimental manipulation (systematic) respecting between-group effects (combined) or overall experiment effect was 3.104, 3.264, 2.504 as value of mean square for Academic aspect dimension "Sufficient and convenient consultation", Professional appearance/image as part of reputation dimension and "Counseling service" as part of Access dimension whilst (unsystematic) variation due to natural individual difference in courses and different responses towards aforesaid

HEDPERF dimension within groups was found to be 139.680, 146.877, 159.635 (values of mean square).

The test of whether the course group means are the same as represented by the F-ratio for the combined between group effect. The values of F-ratio for Academic dimension "Sufficient and convenient consultation", Professional appearance/image as part of reputation dimension and "Counseling service" as part of Access dimension was found 2.603, 5.051 and 2.969 respectively with its significant indications the likelihood of an F-ratio the size of the one obtained occurring by chance that's only a 0.210 (21% chance). Infact, F-ratio is the ratio of systematic variance to unsystematic variance. Therefore, the probability of 0.210 (21% chance) for F-ratio was also found to be less than 0.05 percent significance level which indicates course-wise significant effect on "sufficient convenient and consultation", Professional appearance / image as part of reputation dimension and "Counseling service" as part of Access dimension.

The rest of the six variables namely, as depicted in Table 3 clearly reveal significance value of Levene's statistic of homogeneity of variances and F (Robust tests of equality of means) greater than 0.05, indicating insignificant variances across courses i.e., B.Com, B.Com (Hon's) BCA, BBA and M.Com.

Therefore, the null hypothesis (H0) *“There is no significant mean difference in service quality satisfaction towards Academic Performance, Reputation and Access across five courses namely B.Com, B.Com hon’s, BCA, BBA, M.Com in Govt. SPMR College of Commerce”* is rejected and the alternate hypothesis (H1) *“There is significant mean difference in service quality satisfaction towards Academic Performance, Reputation and Access across five courses namely B.Com, B.Com Hon’s, BCA, BBA, M.Com in Govt. SPMR College of Commerce”* is supported.

the overall student’s satisfaction. There is significant correlation between 41 variables of the service quality. Therefore, there is still need for further improvement. The results revealed that the number of items exhibiting below average responses is areas of concern and should be improved.

The table 3 highlights the statistically significant relationship between HEDPERF Model dimension and student’s satisfaction. Service quality variables such as Non-Academic, Reputation and Access have the lowest score which means that these areas should be improved. Such factors are “Good communication”, “Service within reasonable time frame”, Caring and individualized “should be improved under Non-Academic aspect.

Areas like “Ideal campus location/layout”, “Health service”, “Hostel facilities and equipment” under reputation should be given more attention to raise the level of student’s satisfaction. Other initiatives such as “feedback for improvement”, service delivery procedures should be taken care while rendering services to students to increase their level of satisfaction. The higher the level of insight good service performance in the dimension to student’s needs, the higher the level of customer satisfaction. There is significant mean difference in service quality satisfaction towards Academic performance, Reputation and Access

Institutional Programs /Courses	B.Com		B.Com Hon's		BCA		BBA		M.Com		Total		Levene statistics	F value						
	Sum of Squares	df	Mean Square	df	Mean Square	df	Mean Square	df	Mean Square	df	Mean Square	df								
Academic Aspect: Faculty on progress	22.940	4	5.735	10.297	1	10.297	15.207	3	5.069	153.050	45	3.401	176.000	49	3.735	382	1.686			
Technical and convenient information	32.320	4	8.080	23.765	1	23.765	17.457	3	5.819	139.680	45	3.104	172.000	49	3.520	345	2.603*			
Reputation	65.943	4	16.486	28.723	1	28.723	11.297	3	3.766	146.877	45	3.264	212.820	49	4.344	2.730	5.051*			
Professional appearance/im age	30.258	4	7.564	5.246	1	5.246	.290	1	.290	29.968	3	9.989	150.482	45	3.344	180.720	49	3.564	1.939	2.382
Internal quality programmes	15.247	4	3.812	11.098	1	11.098	9.856	1	9.856	8.391	3	2.797	117.473	45	2.611	150.720	49	3.821	482	1.960
Ideal campus location/layout	31.867	4	7.967	10.103	1	10.103	2.670	1	2.670	29.197	3	9.732	144.613	45	3.234	176.480	49	3.967	547	2.479
Access	31.894	4	7.973	5.778	1	5.778	.352	1	.352	31.812	3	10.604	159.636	45	3.547	290.000	49	6.091	3.504	2.051
Faculty contacted by online	29.793	4	7.448	1.726	1	1.726	9.178	1	9.178	21.357	3	7.119	132.685	45	2.938	147.420	49	3.424	1.882	2.980*
Service delivery procedures	28.408	4	7.102	8.563	1	8.563	2.207	1	2.207	26.201	3	8.734	142.082	45	3.258	170.500	49	3.582	1.995	2.349

### Strategic Implications

This research paper applied standardized HEdPERF scale developed by Firdaus Abdullah (2006a) to generate responses from students of five different courses. After the analysis of study, it can be concluded that each variable of service quality influence overall service satisfaction of the students. Variables of service quality such as Non-Academic aspect, Academic aspect, reputation, Access and Program issues have significant relationship with



across five courses namely B.Com, B.Com (Hon's), BCA, BBA and M.Com in Government SPMR College of Commerce. Factor such as "Significant convenient consultation" under Academic aspect should be provided.

Further effective and timely motivation can increase satisfaction level of students. Factor like "Professional appearance/image under reputation should be improved. It can be improved by participating in various researches such as government funded project and increasing alumni engagement. Factor like "counseling service" under access should be offered to the students so that students come to know which course interests them to make career in it. When students are counseled about the course it increases the level of student's satisfaction. Other 38 insignificant variables should also be improved because these variables also play an important role in student's satisfaction.

Further, the college should also pay attention to other variables like Non-Academic and Program issues because these are essential factors for increasing the satisfaction level of students. Based on the performed analysis it can be concluded that there is a mean difference in service quality satisfaction towards Academic Performance, Reputation and Access across five courses namely B.Com, B.Com (Hon's), BCA, BBA and M.Com in Government SPMR College of Commerce, Jammu.

## **Limitations**

Though efforts have been made to specifically study 'Academic performance', Reputation and Access, more elaborative and indepth analysis would certainly reveal generalized view of the topic under discussion. A study with larger sample would have ensured better representation of the population. This paper cannot be generalized for other organizations which differ in terms of situational, topographical and educational factors affecting the teacher-student relationship.

## **References**

- [1] Abdullah, F. (2006). Measuring service quality in higher education: HEdPERF versus SERVPERF. *Marketing Intelligence & Planning*. Vol. 24 No. 1. pp. 31-47. <https://doi.org/10.1108/02634500610641543>
- [2] Abdullah, F. (2005). HEdPERF versus SERVPERF: The quest for ideal measuring instrument of service quality in higher education sector. *Quality Assurance in Education*. Vol. 13 No. 4. pp. 305- 328. <https://doi.org/10.1108/09684880510626584>
- [3] Ada, Sefer, Baysal, Z. Nurdan, Seda, Senem and Erkan, Sahenk (2017). An Evaluation of Service Quality in Higher Education: Marmara and Nigde Omer Halisdemir Universities' Department of Education Students. *Universal Journal of Educational Research*, 5(11), 2056-2065.
- [4] Adinegara, GustiNgurahJoko and Putra, Putu Steven Eka (2016). Assessment of Service Quality in Higher Education: Case Study in Private University. *International Journal of Business and Management Invention*, 5(9), 82-88.
- [5] Amos Ijupitil Peter, Hassan Zubair (2017). Quality of Teaching and its influence on Student Satisfaction and Intention to continue with the Institutions. *International Journal of Education , Learning and Training*. 2017; 2(1): 2289 – 6694.
- [6] Azam, A. (2018). Service Quality Dimensions & Student's Satisfaction: A Study of Saudi Arabian Private Higher Education Institutions. *European Online Journal of Natural Social Sciences*, 7(2), 275-284
- [7] Chandra, T., Ng, M., Chandra, S., Priyono. (2018). The Effect of Service Quality on Student Satisfaction and Student Loyalty: An Empirical Study. *Journal of Social Studies Education Research*, 9(3),109-131.
- [8] Green, p. (2014) Measuring Service Quality in Higher Education: A South African Case Study. *Journal of International Education Research*, 10(2), 131-141.
- [9] Hanaysha, R.M.J., Abdullah, H.H., Warokka, A. (2011) Service Quality and Student's Satisfaction at Higher Learning Institutions The competing Dimension of Malaysian Universities Competitiveness. *IBIMA Publishing Journal of Southeast Asian Research*, Vol. 2011; 855931: 10.5171/2011.855931.
- [10] Kara, M.A., Tanui, E., Kalai, M.J. (2016). Educational Service Quality and Student's Satisfaction in Public Universities in Kenya . *International Journal of Education and Social Science*, 2(10), 37-46.



- [11] Khodayari, F., Khodayari, B. (2011). Service Quality in Higher Education Case Study: Measuring service quality of Islamic Azad University, Firoozkooh branch. *Interdisciplinary Journal of Research in Business*, 1(9), 38-46.
- [12] Mazumder, H.Q. (2013). Student Satisfaction in Private and Public Universities in Bangladesh. *International Journal of Education & Research in Education*, 2(2), 77-84.
- [13] Mestrovic, D. (2017). Service Quality, Student's Satisfaction & Behavioral Intention in STEM & IC Higher Education Institutions. *Interdisciplinary Description of Complex System*, 15(1), 66-77
- [14] Muhammad N, Kakakhel SJ, Baloch QB, Ali F. (2018). Service Quality the Road Ahead for student's satisfaction. *Review of Public Administration and Management*. 2018; 6(2): 2315-7844.
- [15] Mwiya, B., Bwalya, J., Siachinji, B., Sikombe, S., Chanda, H., Chawala, M. (2017). Higher Quality & Student Satisfaction Nexus: Evidence from Zambia. *Scientific Research Publishing*, 8(2), 1044-1068.
- [16] Napitupulu, D. (2018). Analysis of Student Satisfaction Towards Quality of Service Facility. *Journal of Physics : Conf. Services* 954. 2018: 1742 – 6596.
- [17] Onditi, E. O., & Wechuli, T. W., (2017). Service Quality and Student Satisfaction in Higher Education Institutions: A Review of Literature. *International Journal of Scientific and Research Publication*, 7(7), 2250-3153.
- [18] Oluwunmi, Ajibola, Irouham & Eluyele. (2017). Students Satisfaction with major Academic Facilities in Private Universities in Ogun State, Nigeria. *Covenant Journal of Business & Social Sciences*, 8(1), 4
- [19] Raju, M.Sreerama and Bhaskar, N. Udaya (2017). Service Quality in Higher Education: A review and conceptual model. *International Journal of Science Technology and Management*, 6(2), 891-900.
- [20] Saleem, S.S., Moosa, K., khan, A.R. (2017). Service Quality & Students Satisfaction: The moderating role of University Culture, Reputation & Price in Education Sector in Pakistan. *Iranian Journal of Management Studies*, 10(1), 237-258.

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