

THE DEMOGRAPHIC FACTORS ON ONLINE/DISTANCE PROGRAM OF ASHE FOR DEEMED UNIVERSITIES IN TAMIL NADU, INDIA: SERVQUAL APPROACH

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Abstract: This study attempts to examine the Demographic Factors on Online/Distance Program of ASHE inflecting service quality dimensions (tangibility, responsiveness, reliability, assurance and empathy). Furthermore, this study is also examining critical factors in service quality dimensions (tangibility, responsiveness, reliability, assurance and empathy) that contribute most to the satisfaction of the students. This study was conducted using a set of questionnaire to 610. The study will provide results from empirical test of these relationships. The empirical results of this study can provide support for the Parasuraman's SERVQUAL (1985), which related to the factors contributing to students' satisfaction.

Keywords: Online/Distance Program, ASHE, SERVQUAL, Demographic factors.

INTRODUCTION

The number of online/distance mode institutions is increasing every year. Therefore, the focus on evaluation of learners' towards quality initiatives, should be given paramount importance, which will further help in strengthening the overall brand of the Arts and Science Higher Education (ASHE) of Deemed Universities, in Tamil Nadu, India. Online/Distance learning programs in higher education tend to care about learners' satisfaction because of its potential impact on learners motivation, retention, recruitment efforts, and fund raising. Educational reforms have been taking place for many years in India, as successive governments have encouraged massive expansion of education in the country. Deemed university is a single institution, which is empowered to confer its own educational degrees to its graduating learners. Increasing attention is being paid to service quality and this has resulted in more progress and profit to organizations.

The challenges of quality in Indian Higher Education include: (1) inability to attract sufficiently large number of talented young people to teaching; (2) separation of education from research; (3) inadequate financing; (4) belief in the adequacy of investor run private Deemed Universities, and the financial and political power of such investors; (5) short term profit orientation on Education in a large part of the business community; (6) administrative weaknesses and wasteful expenditures. Abdulai Abukari & Trevor Corner (2010) propose that the quality of Higher Education in the developing world should be centered on how the system can be more pragmatic in policy, scope and delivery that reflect current challenges and translate into core activities of teaching and learning and, research and community engagement; which should then be supported by a well designed quality audit system that is appropriate in assessing, in the practical sense, the impact of the university activity on its socio economic and cultural environment.

This is because the course of development has no specific or well defined pattern, and communities can alter the pattern by being strategic, proactive and innovative by leapfrogging through dealing simultaneously with both internal and external challenges. Improvisation sparred by need is often noticed in communities that are on the path of development. Ahmadreza Shekarchizadeh et al (2011) studied the service quality perception and expectation of international postgraduate learners studying in selected Malaysian Deemed Universities. A gap analysis based on a modified SERVQUAL instrument was used on 522 international postgraduate learners who

were selected based on stratified sampling of the top five public Deemed Universities. Five factors in the form of professionalism, reliability, hospitality, tangibles, and commitment were uncovered. The single mean t-tests for the three methods of gap analysis indicated that all the items of perception were perceived as significantly negative as compared to expectations. Also, the findings from the study will assist in designing a quality system that involves not just the employees, but also the learners. Ironically, most studies on service quality at institutions of Higher Education tend to concentrate on the undergraduate learners and/or the Education providers. As the international postgraduate segment is more profitable, this research is timely and is expected to present significantly different results from those found in most literature.

Al Khattab & Fares Fraij (2009) studied the satisfaction of the learners at Al-Hussein Bin Talal University, Jordan, related with the quality of e-services. It mainly concentrated on the student satisfaction with the in house developed Student Information System (SIS). The study opens the door to conduct similar studies across public and Deemed Universities and compare the results with this study. Furthermore, the results of this study have started efforts to measure and compare student satisfaction regarding SIS services among Jordanian Deemed Universities. Replication studies using large samples would be useful in order to confirm this study finding.

REVIEWS

Alistair Inglis (2008) in his work has attempted the framework of quality. Framework applicable to the field of e-learning are described and the methods used to validate each of the frameworks are identified and compared. Six methods of validation were found to have been used in relation to development of the seven frameworks that were examined: reviewing the research literature related to effectiveness in online learning; seeking input from an expert panel; undertaking empirical research; undertaking survey research; conducting pilot projects; and drawing on case studies. From the variety of approaches used and the ways in which they were used it was concluded that a recognized set of procedures for validation of quality frameworks has not yet emerged.

Ana Brochado (2009) in her research of Educational literature suggests how imperative it is for HE institutions to actively monitor the quality of the services they offer and to commit themselves to continuous improvements. Therefore, it is important to use a reliable instrument to measure service quality. This study compared the performance of five alternative measures of service quality by gathering data from Portuguese Learners belonging to a Arts school in Lisbon. The alternative scales considered, respectively, SERVPERF, SERVQUAL, importance weighted SERVPERF, importance weighted SERVQUAL and HEDPERF (Higher Education Perception) were compared in terms of univariability, reliability, validity and explained variance of five instruments.

Angell et al (2008) measured educational service quality based on a sample of UK postgraduate learners. Initially, the authors elicited twenty important service attributes from in depth interviews. These service attributes were then grouped into four service factors (i.e. academic, leisure, industry links, and cost) by using exploratory factor analysis. The results of analysis suggested that academic and industry links were more important than leisure and cost. The authors contended that postgraduates viewed their postgraduate experiences as a critical step to a career. As a result, these learners placed great importance on the academic aspects and industry linked service factors.

Antonia Stefani et al (2006) in their study nevertheless shifted the focus on its technological variable in Higher Education. Designing, developing and supporting a large scale e-learning application for Higher Education is still a challenging task in many ways. E-learning is data intensive, user driven, and has increasing needs for multiculturalism, efficiency, and competitiveness. Although the complexity of such systems has increased exponentially, the design process still lacks a systematic quality control procedure. In this work, the authors addressed increasing need for new methods that maximize usability, and thus end user satisfaction. They analyzed the technological, managerial and economic factors that affect the design and deployment of a large e-

learning platform with advanced services and propose a set of new metrics for assessing its quality. The metrics are based on the four external quality characteristics (functionality, usability, efficiency and reliability).

Atul Gupta et al (2005) found that the possible motivations for outsourcing are cost savings and budgetary constraints, improvement of quality of services and staffing, lack of capability, safety concerns or liability of service, command from governing bodies, and pressure from peer institutions. This is not an exhaustive survey of all the public schools in the USA and it surveyed only the opinions of presidents and/or vice-presidents of the selected schools.

Azizah Rajab et al (2011) elaborate on the post graduate learner's perspective on Education service quality based on effectiveness of managing the quality of teaching and learning in High Educational Institution. Two methods of collecting data focusing on quantitative and qualitative method are used. The Analysis Model of SERVPERF had been used for Questionnaire about service quality. A simple random sampling is used among international post-graduate learners. This paper discusses the findings and the implications of the study towards generating good Educational services whilst concurrently producing qualified post-graduate learners by providing an elevated, sophisticated and acclaimed service quality towards its international learners.

Cecilia Temponi (2005) attempts to analyze the main elements of continuous improvement (CI) in Higher Education and the concerns of academia's stakeholders in the implementation of such an approach. The author suggests guidelines for the development of a culture more receptive to the implementation and maintenance of a CI approach in Higher Education. Future research should explore more to identify core issues needing to be addressed to speed up the shift towards a CI culture. Required accreditations in colleges and Deemed Universities offer an increasingly important role to a CI approach in Higher Education and its impact on academic stakeholders and fulfil identified information/resources need and offers practical help to colleges of business seeking accreditations and institutions of Higher Education pursuing CI initiatives.

Service quality is considered an important tool for a firm's struggle to differentiate itself from its competitors. The relevance of service quality to companies is emphasized here especially the fact that it offers a competitive advantage to companies that strive to improve it and hence bring customer satisfaction. Service quality has received a great deal of attention from both academicians and practitioners. Understanding service quality must involve acknowledging the characteristics of service, which are intangibility, heterogeneity and inseparability. In that way, service quality would be easily measured. The possibilities of increasing the market competence of a company depend on how soon it understands and accepts the importance of providing customer consistency. Customer perceived service quality has been given increased attention in recent years, due to its specific contribution to business competitiveness and developing satisfied customers.

This makes service quality a very important construct to understand by firms by knowing how to measure it and making necessary improvements in its variables where appropriate especially in areas where gaps between expectations and perceptions are wide. In the context of higher education, the researchers are not only interested in learning more about the factors associated with service quality perceived by learners' and how service quality is measured but also provide a direction for improvement of service quality in order to bring learners' satisfaction. Hence, there is a need to find answer to the following questions: Whether the perception of service quality differences among the various profiles of the respondents?

METHODS

This study was adopted from Parasuraman's SERVQUAL dimensions. The dimensions included in this variable are tangibility, assurance, responsiveness, reliability, and empathy. The samples in this study were ASHE students studying at a deemed universities in Tamil Nadu. We have distributed 700 questionnaires for every institution. Finally, 610 respondents completed and returned the questionnaires, which represents about 87% response rate. Using the five dimensions in service quality (tangibility, assurance, reliability, responsiveness and

empathy) using the Likert scale from 1 for not satisfied at all to 5 for very satisfied. The data analysis for this study conducted through ‘Statistical Package for Social Science’ software / IBM SPSS version 20. The study also tested reliability of the instrument so that it enables to produce a robust and valid result.

RESULTS AND DISCUSSION

The term ‘analysis’ refers to the computation of certain measures along with searching for patterns of relationship that exist between data groups (Kothari,C.R. 2010). During analyses, the emphasis is on identifying themes and patterns in the data. This chapter deals with analysis and discussion of the information collected from 610 respondents who belonged to Deemed Universities in Tamil Nadu.

The collected data was tabulated, analyzed and interpreted using descriptive and inferential statistics. Analysis and interpretation of the data were classified according to objectives of the study. Percentage analysis was performed for each question in the questionnaire, mainly to ascertain the distribution of respondents under each category. This section deals with the data pertaining to the demographic variables of the respondents, as presented in the research gap section.

Table 1: Demographic classification of the respondents

| Demographic variables | | Frequency | Total Percentage |
|-----------------------|---------------|-------------|------------------|
| Gender | Male | 448 (73.44) | 610 (100) |
| | Female | 162 (6.56) | |
| Age | 22 - 30 years | 529 (86.72) | 610 (100) |
| | 31 - 35 years | 38 (6.23) | |
| | >35 years | 43 (7.05) | |
| Faculty of Study | Science | 193 (31.64) | 610 (100) |
| | Arts | 417 (68.36) | |
| Course of Study | Maths | 61 (10.00) | 610 (100) |
| | Physics | 265 (43.44) | |
| | Chemistry | 53 (8.69) | |
| | Economics | 33 (5.41) | |
| | Sociology | 198 (32.46) | |
| Year of Study | First Year | 25 (4.10) | 610 (100) |
| | Second year | 585 (95.90) | |

Note: (Numbers in brackets represents percentage)

The analysis of the demographics in Table 4.1 shows that 73.44 percentages of respondents are Male and 26.56 percentages are Female. The percentage of women in post graduation is showing a decline.

According to the age group of respondents, it shows that 86.72 percentages of respondents were in the age group of 22 - 30 years, 6.23 percentages were 31-35 years old and 7.05 percentages of them were above 35 years. Thus it can be interpreted that highest percentage was in the age group of 22-30 years, as it is the normal age of enrolment of learners in continued higher education.

Faculty of respondents shows that 31.64 percentages of respondents were from Science and 68.36 percentages were from Arts courses. Thus it can be interpreted that highest percentage was in the Faculty of Arts, which is in proportion to the nature of courses offered in the study area.

Course of study shows that 10 percentage of the respondents were pursuing Maths, 43.44 percentage of respondent's course of study was Physics, 8.80 percentage of the respondents were doing Chemistry, 8.69 percentage of them were doing Economics, by Research and 32.46 percentage of them were pursuing Sociology. Thus it can be interpreted that highest percentage of course of study was Physics, as the percentage of enrolment in Post Graduate Programmes. The year of study of respondents shows that 4.10 percentage of respondents were in First year and 95.90 percentage were in second year. Thus it can be interpreted that highest percent respondents was in the second year of study, as they could express a better about opinion about Service Quality of their institutions.

By referring to demographic characteristics of Arts and Science learners in Online/Distance learning programs, Tamil Nadu and SERVQUAL scores in Tables two to six; percentages analysis, independent sample t-test and one way ANOVA tests were conducted in order to examine the significance of relationships between them. Five hypotheses were tested and they are given below:

H₀1: There is no significant difference between Gender and SERVQUAL scores

Table 2 presents the t-test analyses of perception of respondents among gender. In the tangible variable, mean value of male is (M =3.65, SD = 0.499), female is (M =3.67, SD = 0.477), and there is no significant relationship between gender and tangibility because the sig. value is 0.603<0.05. In the reliability variable, mean value of male is (M =3.60, SD = 0.680), female is (M =3.75, SD = 0.603), and there is no significant relationship between gender and reliability because the sig. value is 0.363<0.05.

Table 2: T-test for Gender and SERVQUAL Scores

| SERVQUAL Variables | Gender | N | Mean | SD | t | p | Sig. |
|--------------------|--------|-----|------|-------|------|-------|------|
| Tangibility | Male | 448 | 3.65 | 0.499 | 0.52 | 0.603 | NS |
| | Female | 162 | 3.67 | 0.477 | | | |
| | Total | 610 | 3.66 | 0.488 | | | |
| Reliability | Male | 448 | 3.70 | 0.680 | 0.91 | 0.363 | NS |
| | Female | 162 | 3.75 | 0.603 | | | |
| | Total | 610 | 3.73 | 0.655 | | | |
| Responsiveness | Male | 448 | 3.83 | 0.599 | 0.07 | 0.947 | NS |
| | Female | 162 | 3.83 | 0.690 | | | |
| | Total | 610 | 3.83 | 0.644 | | | |
| Assurance | Male | 448 | 3.67 | 0.678 | 0.04 | 0.971 | NS |
| | Female | 162 | 3.67 | 0.706 | | | |
| | Total | 610 | 3.67 | 0.692 | | | |
| Empathy | Male | 448 | 3.73 | 0.754 | 0.34 | 0.731 | NS |
| | Female | 162 | 3.71 | 0.694 | | | |
| | Total | 610 | 3.72 | 0.724 | | | |

Note: NS (Not Significant)

In the responsiveness variable, mean value of male is (M =3.83, SD = 0.599), female is (M =3.83, SD = 0.690), and there is no significant relationship between gender and tangible factors because the sig. value is 0.947<0.05. In the assurance variable, mean value of male is (M =3.67, SD = 0.678), female is (M =3.67, SD = 0.706), and there is no significant relationship between gender and assurance because the sig. value is 0.971<0.05. In the empathy variable, mean value of male is (M =3.73, SD = 0.754), female is (M =3.71, SD = 0.694), and there is

no significant relationship between gender and empathy because the sig. value is $0.731 < 0.05$. Independent t-test analyses conducted shows that SERVQUAL scores for respective gender categories did not differ significantly.

Therefore, the null hypothesis (H_0) is accepted. Respondents of both the gender perceived the SERVQUAL variables equally.

H₀2: There is no significant difference between Age and SERVQUAL scores

Table 3 is the ANOVA analysis of perception of respondents among different age group.

In the tangibility variable highest mean value of age group is 22-30 years ($M = 3.67$, $SD = 0.487$), lowest mean value of age group is > 35 years ($M = 3.53$, $SD = 0.556$), and there is no significant relationship between age group and tangibility because the sig. value is $0.221 < 0.05$. In the reliability variable highest mean value of age group is 22-30 years ($M = 3.73$, $SD = 0.669$), lowest mean value of age group is 31- 35 years ($M = 3.57$, $SD = 0.583$), and there is no significant relationship between age group and reliability because the sig. value is $0.141 < 0.05$. In the responsiveness variable highest mean value of age group is 31-35 years ($M = 3.90$, $SD = 0.484$), lowest mean value of age group is > 35 years ($M = 3.73$, $SD = 0.467$), and there is no significant relationship between age group and responsiveness because the sig. value is $0.473 < 0.05$.

Table 3: ANOVA for Age range and SERVQUAL Scores

| SERVQUAL Variables | Age | N | Mean | SD | F | p | Sig. |
|--------------------|---------------|-----|------|-------|------|-------|------|
| Tangible | 22 - 30 years | 529 | 3.67 | 0.487 | 1.51 | 0.221 | NS |
| | 31 - 35 years | 38 | 3.63 | 0.499 | | | |
| | > 35 years | 43 | 3.53 | 0.556 | | | |
| | Total | 610 | 3.66 | 0.493 | | | |
| Reliability | 22 - 30 years | 529 | 3.73 | 0.669 | 1.97 | 0.141 | NS |
| | 31 - 35 years | 38 | 3.57 | 0.583 | | | |
| | > 35 years | 43 | 3.58 | 0.596 | | | |
| | Total | 610 | 3.71 | 0.660 | | | |
| Responsiveness | 22 - 30 years | 529 | 3.83 | 0.643 | 0.75 | 0.473 | NS |
| | 31 - 35 years | 38 | 3.90 | 0.484 | | | |
| | > 35 years | 43 | 3.73 | 0.467 | | | |
| | Total | 610 | 3.83 | 0.624 | | | |
| Assurance | 22 - 30 years | 529 | 3.69 | 0.690 | 1.31 | 0.271 | NS |
| | 31 - 35 years | 38 | 3.62 | 0.629 | | | |
| | > 35 years | 43 | 3.52 | 0.655 | | | |
| | Total | 610 | 3.67 | 0.685 | | | |
| Empathy | 22 - 30 years | 529 | 3.74 | 0.751 | 0.77 | 0.462 | NS |
| | 31 - 35 years | 38 | 3.60 | 0.660 | | | |
| | > 35 years | 43 | 3.67 | 0.645 | | | |
| | Total | 610 | 3.73 | 0.738 | | | |

Note: NS (Not Significant)

In the assurance variable highest mean value of age group is 22-30 years ($M = 3.69$, $SD = 0.690$), lowest mean value of age group is > 35 years ($M = 3.52$, $SD = 0.655$), and there is no significant relationship between age group and assurance because the sig. value is $0.271 < 0.05$. In the empathy variable highest mean value of age group is 22-30 years ($M = 3.74$, $SD = 0.751$), lowest mean value of age group is 31-35 years ($M = 3.60$, $SD = 0.660$), and there is no significant relationship between age group and empathy because the sig. value is $0.462 < 0.05$.

The results of ANOVA show that there is no significant difference in the perception of SERVQUAL variables among the age groups considered for the study. Therefore, null hypothesis (H_0) is accepted.

H₃: There is no significant difference between Faculty of Study and SERVQUAL scores

Table 4 is the independent t-test analyses of perception of respondents among different faculty of study. In the tangibility variable mean value of science is ($M = 3.65$, $SD = 0.485$), Arts is ($M = 3.66$, $SD = 0.497$), and there is no significant relationship between the faculty of study and tangible because the sig. value is $0.884 > 0.05$. In the reliability variable mean value of science is ($M = 3.64$, $SD = 0.722$), Arts is ($M = 3.74$, $SD = 0.628$), and there is no significant relationship between the faculty of study and reliability because the sig. value is $0.091 > 0.05$. In the responsiveness variable mean value of science is ($M = 3.90$, $SD = 0.592$), Arts is ($M = 3.80$, $SD = 0.636$), and there is no significant relationship between the faculty of study and tangible because the sig. value is $0.067 > 0.05$.

Table 4: T-test for Faculty of Study and SERVQUAL Scores

| SERVQUAL Variables | Faculty | N | Mean | SD | T | p | Sig |
|--------------------|---------|-----|------|-------|------|-------|-----|
| Tangibility | Science | 193 | 3.65 | 0.485 | 0.15 | 0.884 | NS |
| | Arts | 417 | 3.66 | 0.497 | | | |
| | Total | 610 | 3.66 | 0.491 | | | |
| Reliability | Science | 193 | 3.64 | 0.722 | 1.69 | 0.091 | NS |
| | Arts | 417 | 3.74 | 0.628 | | | |
| | Total | 610 | 3.69 | 0.675 | | | |
| Responsiveness | Science | 193 | 3.90 | 0.592 | 1.84 | 0.067 | NS |
| | Arts | 417 | 3.80 | 0.636 | | | |
| | Total | 610 | 3.85 | 0.616 | | | |
| Assurance | Science | 193 | 3.62 | 0.686 | 1.13 | 0.258 | NS |
| | Arts | 417 | 3.69 | 0.684 | | | |
| | Total | 610 | 3.66 | 0.685 | | | |
| Empathy | Science | 193 | 3.65 | 0.761 | 1.83 | 0.068 | NS |
| | Arts | 417 | 3.76 | 0.725 | | | |
| | Total | 610 | 3.71 | 0.743 | | | |

Note: NS (Not Significant)

In the assurance variable mean value of science is ($M = 3.62$, $SD = 0.686$), Arts is ($M = 3.69$, $SD = 0.684$), and there is no significant relationship between the faculty of study and assurance because the sig. value is $0.258 > 0.05$. In the empathy variable mean value of science is ($M = 3.65$, $SD = 0.761$), Arts is ($M = 3.76$, $SD = 0.725$), and there is no significant relationship between the faculty of study and empathy because the sig. value is $0.068 > 0.05$.

Independent t-test analyses conducted shows that SERVQUAL scores for respective faculty categories did not differ significantly. Therefore, the null hypothesis (H_0) is accepted. Respondents of both the faculty perceived the SERVQUAL variables equally.

H₀4: There is no significant difference between Course of study and SERVQUAL scores

Table 5: ANOVA for Course of study and SERVQUAL Scores

For the tangible variable, the highest mean value of course of study is Economics. (M =3.81, SD = 0.439), lowest mean value of course of study is Maths. (M =3.57, SD = 0.526), and there is no significant relationship between course of study and tangibility because the sig. value is 0.229<0.05.

For the reliability variable, the highest mean value of course of study is Economics. (M =3.80, SD = 0.603) and Sociology, (M =3.80, SD = 0.608) lowest mean value of course of study is Chemistry (M =3.45, SD = 0.691), and there is a highly significant relationship between course of study and reliability because the sig. value is 0.008>0.05. Based on this result the researcher found that, ability of the professor and staff to performance the promised services comparatively Maths, Chemistry course and Economics and Sociology services are good.

| SERVQUAL Variables | Course of Study | N | Mean | SD | F | p | Sig. |
|--------------------|-----------------|-----|------|-------|------|-------|------|
| Tangible | Maths | 61 | 3.57 | 0.526 | 1.41 | 0.229 | NS |
| | Physics | 265 | 3.64 | 0.497 | | | |
| | Chemistry | 53 | 3.65 | 0.505 | | | |
| | Economics | 33 | 3.81 | 0.439 | | | |
| | Sociology | 198 | 3.68 | 0.480 | | | |
| | Total | 610 | 3.66 | 0.493 | | | |
| Reliability | Maths | 61 | 3.61 | 0.736 | 3.45 | 0.008 | HS |
| | Physics | 265 | 3.71 | 0.668 | | | |
| | Chemistry | 53 | 3.45 | 0.691 | | | |
| | Economics | 33 | 3.80 | 0.603 | | | |
| | Sociology | 198 | 3.80 | 0.608 | | | |
| | Total | 610 | 3.71 | 0.660 | | | |
| Responsiveness | Maths | 61 | 3.98 | 0.614 | 1.47 | 0.209 | NS |
| | Physics | 265 | 3.81 | 0.640 | | | |
| | Chemistry | 53 | 3.82 | 0.586 | | | |
| | Economics | 33 | 3.94 | 0.432 | | | |
| | Sociology | 198 | 3.79 | 0.636 | | | |
| | Total | 610 | 3.83 | 0.624 | | | |
| Assurance | Maths | 61 | 3.60 | 0.706 | 1.89 | 0.111 | NS |
| | Physics | 265 | 3.69 | 0.688 | | | |
| | Chemistry | 53 | 3.45 | 0.668 | | | |
| | Economics | 33 | 3.74 | 0.462 | | | |
| | Sociology | 198 | 3.71 | 0.702 | | | |
| | Total | 610 | 3.67 | 0.685 | | | |
| Empathy | Maths | 61 | 3.58 | 0.728 | 2.39 | 0.050 | S |
| | Physics | 265 | 3.76 | 0.738 | | | |
| | Chemistry | 53 | 3.51 | 0.782 | | | |
| | Economics | 33 | 3.72 | 0.547 | | | |
| | Sociology | 198 | 3.80 | 0.747 | | | |
| | Total | 610 | 3.73 | 0.738 | | | |

Note: NS (Not Significant), S (Significant), HS (Highly Significant)

For the responsiveness variable, the highest mean value of course of study is Maths, (M =3.98, SD = 0.614) lowest mean value of course of study is Physics. (M =3.81, SD = 0.640), and there is no significant relationship between course of study and responsiveness because the sig. value is 0.209<0.05.

For the assurance variable, the highest mean value of course of study is Economics. (M =3.74, SD = 0.462) lowest mean value of course of study is Maths, (M =3.60, SD = 0.706), and there is no significant relationship between course of study and assurance because the sig. value is 0.111<0.05.

For the empathy variable, the highest mean value of course of study is Sociology. (M =3.80, SD = 0.747) lowest mean value of course of study is Chemistry. (M =3.51, SD = 0.782), and there is a significant relationship between course of study and empathy because the sig. value is equal 0.050<0.05. In this result the researcher construct that, affectionate and individualized deliberation given by professors and administrative staff are discrepancy fairly Maths, Chemistry course are poor, Economics and Sociology services are admirable.

The above all result of ANOVA reveals that there is no significance difference in the course of study and perception of SERVQUAL variables in Tangibility, Responsiveness and Assurance. However, significant difference was observed in Reliability and Empathy variables.

H₅: There is no significant difference between Year of study and SERVQUAL scores

Table 6 presents the t-test analysis on perception of respondents and year of study. In the tangible variable mean value of first year is 3.58, (SD = 0.542), second year is 3.66, (SD = 0.491), and there is no significant relationship between year of study and tangible because the significance value is 0.410<0.05. In the reliability variable mean value of first year is 3.65, (SD = 0.732), second year is 3.71, (SD = 0.677), and there is no significant relationship between year of study and reliability because the sig. value is 0.629<0.05.

In the responsiveness variable mean value of first year is 3.74, (SD = 0.562), second year is 3.83, (SD = 0.632), and there is no significant relationship between year of study and tangible because the sig. value is 0.485<0.05.

Table 6: T- test for Year of study and SERVQUAL Scores

| SERVQUAL Variables | Year of Study | N | Mean | SD | t | P | Sig. |
|--------------------|---------------|-----|------|-------|------|-------|------|
| Tangible | First Year | 25 | 3.58 | 0.542 | 0.82 | 0.410 | NS |
| | Second year | 585 | 3.66 | 0.491 | | | |
| | Total | 610 | 3.66 | 0.517 | | | |
| Reliability | First Year | 25 | 3.65 | 0.732 | 0.48 | 0.629 | NS |
| | Second year | 585 | 3.71 | 0.662 | | | |
| | Total | 610 | 3.71 | 0.677 | | | |
| Responsiveness | First Year | 25 | 3.74 | 0.562 | 0.70 | 0.485 | NS |
| | Second year | 585 | 3.83 | 0.632 | | | |
| | Total | 610 | 3.83 | 0.597 | | | |
| Assurance | First Year | 25 | 3.60 | 0.782 | 0.52 | 0.601 | NS |
| | Second year | 585 | 3.67 | 0.681 | | | |
| | Total | 610 | 3.67 | 0.731 | | | |
| Empathy | First Year | 25 | 3.63 | 0.821 | 0.69 | 0.493 | NS |
| | Second year | 585 | 3.73 | 0.742 | | | |
| | Total | 610 | 3.73 | 0.781 | | | |

Note: NS (Not Significant)

In the assurance variable mean value of first year is 3.60, (SD = 0.681), second year is 3.67, (SD = 0.681), and there is no significant relationship between year of study and assurance because the sig. value is $0.601 < 0.05$. In the empathy variable mean value of first year is 3.63, (SD = 0.821), second year is 3.73, (SD = 0.742), and there is no significant relationship between year of study and empathy because the sig. value is $0.493 < 0.05$. Independent t-test analysis conducted for year of study and SERVQUAL scores for respective categories shows that there is no significant difference in the perception of SERVQUAL variables and the year of study. Therefore, null hypothesis H_{05} is accepted.

FINDINGS

The research objective is determine the service quality variables with respect to the demographic factors influencing ASHE in Online/Distance learning programs, This objective was partially satisfied by examining the means of service quality constructs among each of the seven demographic groups (Gender, Age, Faculty of study, Course of study and Year of Study). The following sections discuss the results pertaining to hypotheses one to seven with help of Independent t-test and ANOVA analyses were accomplished. The results concerning hypothesis 1 value of SERVQUAL scores for respective gender categories did not differ significantly. With help of this hypothesis the researcher may conclude that, the Online/Distance learning programs are providing same services to both ends.

The results regarding hypothesis 2 value of SERVQUAL scores for respective age groups did not differ significantly. In this result outcome researcher very clearly revealed that, Online/Distance learning programs giving similar services to whole age groups. The results regarding hypothesis 3 value of SERVQUAL scores for respective faculty of study did not differ significantly. In this hypothesis result the researcher visualizes that, deemed universalities never doing any discrimination between the faculty of Arts and Science.

The results regarding hypothesis 4 value of SERVQUAL scores for respective of course of study. The significance value of SERVQUAL scores for Reliability and Empathy categories did not differ significantly. Therefore, null hypotheses are accepted and remaining SERVQUAL scores for categories like Tangibility, Responsiveness, and Assurance are rejected. Based on the hypothesis outcome, the researcher predict that, the Online/Distance learning programs learners are getting course wise discrimination services like to access lab, internet amenities, lack of enthusiasm, knowledge, courtesy, ability of the professors and staff to inspire trust and confidence among the learners about their assignment.

The results regarding hypothesis 5 value of SERVQUAL scores for respective of year of study did not differ significantly. In this assumption result the researcher envisions that, deemed universalities never doing any discrimination between years of study learners.

SUGGESTIONS

The researcher, presents the following suggestions from the study, deemed university which will standard and assure learner's empowerment. The important role of measuring service quality in achieving learner's satisfaction is often understated, misunderstood, or disregarded in higher education.

The deemed university must strive hard to expansion and sustain a powerful reputation and brand image in the society. The image speaks trust, reliability, quality, excellence and consistency. The deemed university must also have extended impact on the large society through involvement in social and cultural uplifting. This information is previously confirmed by Alistair Inglis (2008) in their findings.

Learners' feedback is a vital part of effective learning process. It helps learners understand the subject being studied and gives them clear guidance. In this association give importance of learners' perception. The aim of the deemed university must not only be providing employment but to make its learners' fit to be employed in

competent public sector concerns and global companies. The capabilities to do this will enhance the image of the institution and increase learners trust and loyalty (Anu Brochado 2009).

The success of a quality strategy depends on the acceptance and involvement of everybody concerned in its implementation and this requires an organizational culture. The Online/Distance learning programs ASHE is very complex, where knowledge is fragmented into specialized areas and educators are engaged in a highly individual activity of teaching.

Bringing about changes in such a complex system requires commitment and acceptance of a holistic, integrated approach to quality so that it permeates throughout the institution and becomes everyone's responsibility.

At the initial stages of a learner's relationship with the Online/Distance learning programs forms an idea about it. As Online/Distance learning programs witnessed heterogeneous masses from diverse backgrounds, several learners feel inhibited and insecure in the Online/Distance learning programs. The staff members and administrators must take initiative in promoting the learning curve of the learner's by instilling self confidence and positive attitude in them.

Learning is an activity that transcends the class room. Learners learn valuable lessons through campus events and activities. It is essential that Online/Distance learning programs must engage their learners in such events at specified intervals. Such event both technical and non technical provide exposure to learners and enhance their leadership skills, team dynamics and management skills. It is a sure step to make learners confident and satisfied. The intention of every course is to provide employability to the learner. Providing employment opportunities to learners before they exit the campus is the dream of every deemed university. The percentage of placement that a university provides to its learners is an importance yardstick of determining its quality and efficiency. The Online/Distance learning programs should set up a placement cell by responsible and training faculty members to assist and guide learners in their placement procedures with reasonable approach.

Enhanced social awareness and social interdependence is necessary for the all round growth of a learner. The Online/Distance learning programs must provide ample opportunities for learners to interact explore and exchange ideas. These activities can be within the campus or spill over to longer sections of the society. These interactions will help in making learners conscious of their social responsibilities, duties and help them in becoming better citizen. During the course of study, learners may experience instance of procedure block due to ignorance regarding norms. This may relate to instance such as submission of relevant documents, applying for scholarships, receiving certificates and so on. The Online/Distance learning programs must delegate administrative staff members to address the concerns of the learners and simply difficult procedures.

CONCLUSION

Learners' perceptions of the quality of their service experiences should be assessed. Each time a learner experiences some occurrence of an institution's service, that service is judged against their expectations (Parasuraman, Zeithaml & Berry, 1991). In an increasingly competitive higher education arena, research indicates that service quality is an important determinant of learner satisfaction. The study established that academic staff and employers place the greatest emphasis on the core academic factors; i.e. teaching and learning, academic standards and the curriculum. They share the perception that enhancing standards, learner motivation and commitment of the learning process and environment, thereby requiring learners to be active participants in the educational process are most important. The survey also found that the most significant purpose of ASHE is to develop qualities in learners that will allow them to act with a high degree of autonomy by equipping them with the skills to think critically. However, it also revealed that it is undesirable and perhaps impossible to arrive at a single definition of quality or purpose for ASHE. In order to improve level of learners' satisfaction, the Online/Distance learning programs should focus its attention on the variables of service quality that can influence learners' satisfaction and affect their word of mouth communication. However, the Online/Distance learning programs should evaluate service quality continuously in order to create a perception

of uniqueness in the minds of customers (learners') and to gain aggressive improvement in the market place. This can be done through implementing and formulating an effective service quality policy. The policy will lead to different levels of service quality provided by the Online/Distance learning programs and the substantial provision of better services to learners'. This will help the Online/Distance learning programs to enhance the number of its learners' and compete with the other Deemed Universities.

LIMITATION

Service quality has been widely accepted as an antecedent of satisfaction and neglecting it may jeopardize the competitiveness of an organizations as satisfaction and competitiveness of a service related organizations are inter-related. A serious preparation towards the unexpected situation is needed thus that it is in the ability researcher to face and in control of the situation.

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