Undergraduate Education in India : Dissecting the Perception Gaps in Students' Expectations

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Abstract

Providing quality curriculum and programmes within institutions is extremely important in shaping students' perceptions of the overall quality of educational services. Hence, this research administered a survey among 198 final year students of affiliated Arts and Science colleges in Kerala, a state advanced in education and literacy in India, to collect their responses on expectations and satisfaction of the educational service performance at the institutional as well as the course levels. The gap analysis found that the students' expectations were higher than their actual educational experiences in colleges, which was evident in all aspects of the services under investigation. The highest gaps for the institutions were in placement support, timely conduct of examination, and adequate infrastructure ; while for the courses, it was in skill development and employability. However, the results of the regression analysis revealed that not all the factors claimed by the students in gap analysis appeared as the significant determinants of the overall satisfaction towards higher education services generally in India, particularly in Kerala.

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Education is critical to the growth and development of humanity. It is one of the prime indicators of human development in economies. In India, the right to primary education is the fundamental right and every boy and girl in the nation should get free education up to the primary level. Basic or primary education is essential to develop their social, cognitive, emotional, and cultural skills, while higher education prepares people to fight on a professional front (Snelgrove, Familiari, Gallo, Gaudio, Lenzi, & Ziparo, 2009). Higher education institutions make a significant contribution to the economic prosperity and social cohesion through fostering innovation and imparting employability skills. The developing economies like India consider higher education as the major driver of economic growth, national productivity, and competitiveness (Verma, 2004). Thus, the government and society in these economies have a stake in ensuring a constant flow of students in higher education (Akareem & Hossain, 2016).

Economies are exploring efforts to match skills with market needs. India is also not an exception to this. In fact, for the last two decades, there has been a sharp increase in student enrolment in higher education in India (University Grants Commission, 2008). However, the country is still facing the problem of lack of a sufficiently deep talent pool that forces the government to encourage public – private partnerships and internationalization of education to fill the skill gap. Many of the students in India have the feeling that Indian education is inferior in

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quality and less employable. Under this impression, every year, by spending a huge amount of money, a great number of students from India are going abroad to get a better education, which is perceived as the nation's missed economic opportunity. If the regulators design strategic measures to improve the quality of higher education up to the level of students' expectations and at par with the international education, India can keep hold of the local students and attract global students to her universities, which definitely could be a good source of external revenue supporting the economic activities in the sector. For this, education research needs to identify and measure the extent to which students' perceptions influence their satisfaction on higher education quality.

Background and Related Literature

There has been a dramatic change in the environment of higher education for the past many decades. Now, the environment is increasingly global, digital, dynamic, and more competitive than before. Given the competition-oriented economies, conventional higher education institutions are facing lower student preferences and exploring ways to do more, but with fewer revenues. One possible way for them to resolve this issue is to put a new focus on meeting or exceeding their students' expectations and needs. The spectacular rise in student enrollment at private professional institutions in and outside the country is an indicator of students' preferences to take education services from institutions compatible with their service needs. This poses a big challenge to the survival of conventional colleges and universities. In other words, the higher education institutions need to assure a standard quality of service to sustain in the market. These institutions are now service centres like any other business organization and are branding at different value propositions based on the dimensions of the quality of education they provide in comparison to their competitor institutions. The dimensions of quality in higher education measure the quality of students, faculty credentials, academic features, job openings, and administrative support. However, there exist significant differences among the educational offerings of deemed and state universities (Singh, Kazi, Divekar, & Patankar, 2020).

The feedback or responses of the students are very important particulars for providing educators an opportunity to improve the quality of their services and to make a positive perception in the minds of the students about the institutions. Quality higher education could create positive students' perceptions towards the higher educational institutions where the reliability, responsiveness, competence, tangibility, courtesy, goodwill and image, empathy, security, and costs are the dimensions of quality education (Rahman, 2013). The educational and cultural background of the students may influence their perceptions towards higher education ; more specifically, their expectations related to teaching and learning. The findings of the research of Struyven, Dochy, and Janssens (2005) revealed that students' perceptions about assessment significantly influenced their learning behavior. Nevertheless, Prathiba (2020) suggested that faculty behaviors and attitudes largely affected students, and their role has a profound importance in producing student learning outcomes.

Many factors influence student satisfaction in higher educational institutions. The management of colleges and universities should focus on building good relations with the students to minimize the rate of dropouts from their institutions (Anderson & Sullivan, 1993). The quality of the faculty and the student support systems were found to be the most influential factors in the provision of quality education (Hill, Lomas, & MacGregor, 2003). Dicker et al. (2017) found that the teaching and learning experience and relationships with academic staff were the important needs to be explained to the students so that they make out the value of what they are getting from their institutions. According to Gupta (2016), the service quality dimensions such as tangibility, reliability, and responsiveness had a significant influence on student satisfaction and student loyalty in higher education institutions in India.

In their research, Yang, Becerik-Gerber, and Mino (2013) demonstrated that the student perceptions depended heavily on spatial attributes of classrooms, particularly visibility and furniture, and ambient attributes like air

quality and temperature. Moreover, the research revealed the effects of non-classroom attributes, including gender, seating location, cumulative GPA, college year, and expected course grade in the student perceptions of learning environments. However, Richardson (2005) commented that the students' perceptions of the academic quality of courses were strongly associated with the approaches to the study they adopted on such courses. Strategies to endorse academic maturity and lessen stress and fear in students could promote a more positive approach to learning (Lynam & Cachia, 2018).

Teaching competence is an important factor, which the students expect to register maximum importance. According to the survey conducted by Pavlina, Zorica, and Pongrac (2011), the most important teaching competence was the teachers' ability to teach course content clearly and in a self-explanatory manner. They had strong feelings that the teacher could not raise the quality of teaching by use of modern technology, which implied that technology was only a tool while the teacher was the most significant factor that determined the quality of teaching. Good infrastructure like library facilities, laboratory facilities, and internship assistance for students were observed to be the main factors of students' preference towards higher educational institutions (Mamun, 2000). In their study, Zahid, Chowdhury, and Sogra (2000) identified factors like the course system, quality of teaching, medium of instruction, campus size and location, accommodation for the students, and campus facilities such as an auditorium, parking, canteen, indoor and outdoor parking facilities as the prime factors of student satisfaction towards higher educational institutions. Thus, both intangible and tangible elements as well as communication and values affect institutional reputation (Price, Matzdorf, Smith, & Agahi, 2003).

Many studies have already agreed with the quality dimensions of higher education across economies including India. However, research studies exploring students' perceptions of the quality experience in higher education are not splendid indeed. Kerala is one of the leading states in India in terms of both human development and literacy. Higher literacy and successful universalizing of elementary education in the state have ensured a higher base and transition rate at all levels. However, Kerala is instrumental in sending an increased number of students every year for overseas education or education in neighboring states in pursuit of a better career. The incremental trend in the overseas education phenomenon can be attributed either to the quality issues at higher education level in the state or to the lower employability rate. The students who enroll for higher education have their expectations about the education services and learning environment provided by the institutions, and the institutions may be unprepared to deliver the level of services that the students expect. The failure of the institutions to provide a level of service commensurate with students' expectations leads to dissatisfaction and affects the student choice in higher education. A good understanding of students' perceptions of quality and standards can enhance the chances of building good relationships within institutions. The knowledge of what the students perceive and expect can provide valuable information for planners and policymakers to promote the quality of educational services (Kebriaei & Akbari, 2009).

Materials and Methods

Sample and Data

The study was conducted using a formal qualitative questionnaire survey among undergraduate students in Arts and Science colleges under three state universities in Kerala. The study purposively covered only the students of Arts and Science colleges and excluded the students of professional education. The course content and curriculum of the two streams of education are distinct in both design and practice ; hence, the inclusion of the students of professional education in the student sample may have produced inconsistent results. The study applied multistage and purposive sampling methods, where I first selected three major universities and then affiliated colleges of these universities. There exists a regional disparity in the state of Kerala with respect to socioeconomic

development, and hence, the selection of these universities and colleges was required to ensure the regional representation of the students from the state in the sample. The selected colleges from the region included government colleges, private aided colleges, and self-financed colleges. Finally, the students selected from these colleges, based on the judgemental method, constituted the base sample for the study.

The survey was conducted during the end of 2019. Initially, 218 questionnaires were distributed to students in classes, and they were encouraged to participate in the survey. However, only 198 usable questionnaires were obtained. Since the female students outnumber the male students in higher education of Kerala in recent days, the sample of the study was female dominant. The students were in the age group of 18 – 22 years and most of them (163) were business students who were mainly from private aided colleges (Table 1).

Table 1. Descriptives of the Sample Respondents

Demographic Variable	Category	No. of Respondents	%
Gender	Male	76	38.38
	Female	122	61.62
College	Government	44	22.22
	Private Aided	109	55.05
	Self-financing	45	22.72
Age (Years)	19 – 21	174	87.88
	21 – 33	24	12.12
Education	Business	139	70.20
	Arts	37	18.69
	Science	22	11.11

Statistical Design

The dimensions of student satisfaction were measured with assessments using a 5-point Likert scale. Students were asked questions to gauge their expectations and perceptions about the courses they pursued and the institutions providing educational services to them. Computing Cronbach's alpha measure, the reliability of each set of questions was checked separately. The mean score of the response options for the questions was generated to summarize data so collected. The research used a one-sample *t*-test to make inferences on the reasons for and satisfaction with the choice of the course and the institution by the students. The paired *t*-test measured the students' expectation – experience gap regarding the performance of the institution and the course they pursued. Finally, OLS regression proceeded with the students' perception of the courses and institutions found as antecedents of their satisfaction with the higher education services in India.

Model

I modeled two regressions (equation 1 and equation 2). First, satisfaction towards the educational institution and second, satisfaction towards the course as the dependent variable were regressed against the students' perception of the respective performance measures. Accordingly, the first model consisted of 15 independent variables and the second one included six independent variables. These independent variables could potentially influence the students' satisfaction in a multivariate regression framework. The models took the form :

$$Sat_{College} = \alpha_i + \sum_{i=1}^{n} \beta_i X_i + \epsilon \quad .....(1)$$

$$Sat_{Course} = \alpha_i + \sum_{i=1}^{n} \beta_i Y_i + \epsilon \quad .....(2)$$

where, '$Sat_{College}$' is taken as 'Students' satisfaction towards college' and 'Sat_{Course}' is taken as 'Students' satisfaction towards course.' X_i and Y_i are the perceptions of students on college and course, respectively. The β values measure the influence of perception factors on students' satisfaction and 'α' and 'ϵ' represent constant and error (assumed to be zero) terms, respectively.

The study adopted the stepwise regression procedure (Max *R*) that is expected to build a more useful model instead of incorporating all independent variables in the regression system. Max *R* begins with an independent variable that results in the highest R^2 and successively adds variables at each iteration to maximize R^2.

While applying the regression technique, at first we should check whether the problem of collinearity exists in either the data or model and to check this problem, the VIF and tolerance statistics are computed. If the largest VIF is greater than 10, then there is cause for concern (Myers, 1990) and the tolerance statistics below 0.2 indicates a potential problem of collinearity (Menard, 2002) in the model.

Analysis and Results

This section presents the results of the empirical analysis. The structure of this part follows the structure of the study ; hence, it starts with the reliability results, followed by the reasons acknowledged by the students for the choice of institutions and courses. Then the gap, if any, existing between the students' expectations and perceptions of the institutions as well as the courses are identified before assessing the determinants of students' satisfaction about the higher education services in Kerala.

Reliability

Reliability refers to the extent to which a scale produces consistent results if repeated measurements are made (Wilson, 1995). Cronbach's alpha is the most common measure of internal consistency or reliability. As mentioned earlier, reliability analysis has been done separately for each set of questions measuring the perceptions and expectations of the students about the education programs pursued and the performance of the service institutions. Accordingly, the analysis computes four Cronbach values as reported in Table 2.

Table 2. Reliability Test Results : Cronbach's Alpha

Construct	Course Pursued	Educational Institutions
Expectation	0.788	0.867
Perception	0.819	0.764

A Cronbach value of greater than 0.6 indicates higher internal consistency and reliability (Malhotra & Dash, 2016). The computed Cronbach's alpha coefficients for all the four sets of questions indicate the scale used to measure the perceptions or expectations of students is highly reliable. Further discussions give focus on the reasons for the choice of the institution as well as the course according to the students participating in the survey.

The students may have different reasons for choosing a specific institution for pursuing their higher education. It may be based on their preference, attitude, inspiration, etc. Most students who were surveyed stated that they chose an institution based on the allotment by the university and the reputation of the institution (both these factors have an equal mean score of 4.18) followed by the affordability of education (4.13). Some students gave lesser importance to add-on programs and recommendations from others about the choice of institution (3.31). The least

Table 3. Reasons for Choosing an Institution

Variable	Mean	Rank	*t*-value	Sig.	Inference
Location	3.88	5	12.31	0.000*	Significant
Recommendation	3.31	8	3.54	0.000*	Significant
Placement	3.95	4	2.79	0.000*	Significant
Add-on Programs	3.31	8	4.33	0.000*	Significant
Infrastructure	3.95	4	4.33	0.000*	Significant
Extra-curricular	3.46	7	5.89	0.000*	Significant
Allotment by university	4.18	1	16.68	0.000*	Significant
Reputation	4.18	1	20.68	0.000*	Significant
Affordability	4.13	2	19.27	0.000*	Significant
Qualified Faculty	4.11	3	19.56	0.000*	Significant
Scholarship	3.58	6	7.25	0.000*	Significant
Politics-free campus	2.79	9	–2.19	0.029**	Significant

Note. *significant at 1% level ; ** significant at 5% level.

factor considered by the students is a politics-free campus that shows a mean score of 2.79 (Table 3).

Table 4 reveals the reasons behind the choice of a particular program for the students. It is inferred from the analysis that the job prospects and interest in a subject are the main factors motivating students to opt for a particular program. The mean score of these factors is 4.71 and 4.6, respectively. Similarly, students also considered the popularity and potential for higher studies in their education planning. The advice of the family and forced to join a course allotted by the university is the least significant factor in the choice of course by students of Arts and Science colleges in Kerala. Thus, the students planned well while choosing courses for pursuing their higher education studies.

Table 4. Reasons for Choosing a Course

Variable	Mean	Rank	*t* - statistic	*p*-value	Inference
Popularity	4.48	3	25.55	0.000*	Significant
Interest in subject	4.6	2	33.06	0.000*	Significant
Job prospects	4.71	1	49.67	0.000*	Significant
Advice of family	3.43	5	5.65	0.000*	Significant
Prospects for higher education	4.36	4	24.97	0.000*	Significant
Got admission only for this course	2.39	6	–5.86	0.000*	Significant

Note. *significant at 1% level.

Students' Expectations and Satisfaction : Gap Analysis

Students who join specific programs have their expectations regarding various aspects. If a course contains modules that satisfy the students' expectations, it can be sustainable in the future. Hence, this study analyzes the students' expectation – satisfaction gap regarding various performance aspects of the institutions as well as the courses which they were pursuing.

Table 5. Students' Expectations and Satisfaction in Higher Education : Gap Analysis

	Variable	Mean Expectation Score	Mean Satisfaction Score	Mean Difference	*t* - statistic	*p* - value
Institution	Infrastructure	4.12	3.38	0.74	11.30	0.000*
	Quality of the faculty	4.11	3.77	0.34	5.48	0.000*
	Course content	4.12	3.88	0.24	3.52	0.001*
	Academic support	3.95	3.67	0.28	5.61	0.000*
	Additional skill acquisition	4.01	3.43	0.58	2.55	0.011*
	Innovative teaching	3.96	3.55	0.41	6.01	0.000*
	Student freedom	4.12	3.74	0.38	4.56	0.000*
	Creation of good habits	3.82	3.54	0.28	3.92	0.000*
	Exams are conducted timely	4.03	3.29	0.74	9.21	0.000*
	Relation with the staff	4.01	3.40	0.61	8.57	0.000*
	Workload	3.72	3.42	0.30	4.58	0.000*
	Placement support	3.82	3.07	0.75	8.12	0.000*
	Extra-curricular	3.72	3.31	0.41	4.98	0.000*
	Good mentoring	3.79	3.46	0.33	4.91	0.000*
	No loss of working days	3.60	3.32	0.32	3.44	0.001*
Course	Value addition to knowledge	4.09	3.78	0.31	4.95	0.000*
	Imparting practical skills	3.90	3.34	0.56	8.23	0.000*
	Potential for higher education	4.25	4.03	0.22	4.48	0.000*
	Good syllabi	4.31	3.89	0.42	5.76	0.000*
	Creation of employability	4.26	3.74	0.52	7.26	0.000*
	Better job prospects	4.43	3.86	0.57	8.21	0.000*

Note. *Significant at the 1% level.

All the students will have high expectations about the institution they have chosen. However, from the results in Table 5, it is quite evident that the institutions were not performing up to the expectations of the students. Majority of the students will have great expectations of the placement opportunities provided by the institutions. However, the actual performance of the institutions in providing placement opportunities has more deviation from the expectations as revealed by the mean difference of 0.75. Timely examinations and the announcement of results is also much important for students. Nevertheless, the universities to which the colleges are affiliated failed to conduct exams in a time-bound manner as revealed by the mean difference of 0.74. It can be said that the majority of the students were satisfied with their course content because of which the mean difference is less than that of other factors.

On comparing the mean expectation scores towards the course with the mean perception scores and testing the gap using the paired *t* -test, it is observed that there is a significant difference between the two scores. However, the mean difference is more about the creation of employability, closely followed by skills and job prospects. However, the gap is relatively narrow in value addition to knowledge and the potentials of higher education. From these findings, it is logical to infer that the higher education system in India ignores the importance of pillars of skills and wisdom and still focuses on the creation of knowledge, which may not be sufficient for students to create a good career.

Even though students' expectation – experience gap towards institutions and courses exist at a larger level, the

Table 6. Students' Satisfaction Towards Institutions and Courses

Variable	Mean	*t*- statistic	*p* - value
Institution	3.87	14.51	0.000*
Course	4.01	17.93	0.000*

Note. *Significant at the 1% level.

Table 7. Suggestions for Improvement in the Quality of Education

Variable	Mean	Rank	*t* - statistic	*p* - value
Increase the contents of syllabi	3.11	7	1.41	0.160
More practical modules	3.83	5	12.27	0.000*
Exams to be conducted timely	4.51	1	31.36	0.000*
Carry forward of credit to subject learned at a lower level	3.76	6	11.93	0.000*
Good working of placement cells	4.54	2	27.24	0.000*
Freedom to choose the course	4.20	4	22.00	0.000*
Innovative teaching methods	4.27	3	22.20	0.000*

Note. *Significant at the 1% level.

mean satisfaction score analysis reveals the statistical significance of the overall satisfaction of students towards institutions as well as courses (Table 6). However, the respondents are found to be more satisfied with the courses than the institutions where they pursued their education.

Suggestions from beneficiaries are highly essential to bring development and to improve the functional efficiency of the existing system. Hence, this study also sought suggestive measures from the students to improve the current working of the education system (Table 7).

From the responses of the students on a 5-point scale, it is revealed that timely conduct of examinations, efficient working of placement cells, innovative teaching methods, and freedom to choose the courses are the most significant factors that can bring an improvement in the higher education system of the state. The mean score of all these variables is greater than 4, indicating the increased level of importance to these factors. Increasing the content of syllabi is the least important factor suggested by students under survey, which indirectly reveals the sufficient coverage of topics under the current syllabi of most of the courses taught in the colleges in Kerala.

Table 8 and Table 9 present the results of the stepwise regression procedures. In the regression models, the VIF values are all well below 10 and the tolerance statistics are well above 0.2, therefore, the research rightly concludes that no collinearity problem relates to the data used for the analysis. The average VIF also is much less than 10 and this confirms that the collinearity is not a problem.

The results of regression Model 1 indicate that the level of satisfaction of undergraduate students is affected by their perception of the performance of the educational institutions. However, among the 15 performance variables considered for determining their impact on students' satisfaction towards colleges, only five factors – infrastructure, student freedom, creation of good habits, timely conduct of examination, and placement support come out as the strongest determinants. The relationship of student satisfaction with these variables is positive and all are significant at the 1% level.

Next, turning attention to the regression Model 2, the students' satisfaction towards the courses is reported in Table 9. From the results, we can see that only three variables – value addition to knowledge, the potential for higher education, and the creation of employability are the significant determinants of satisfaction with overwhelming evidence on the positive relationship at the 1% level. Among these influencing variables, the effect

Table 8. Factors Influencing Students' Satisfaction Towards Institutions : Stepwise Regression Results

Model	β	Std. Error	*t*	*p*-value	Tolerance	VIF
Constant	1.353	0.311	4.351	0.000*	-	-
Infrastructure	0.385	0.072	5.373	0.000*	0.603	1.659
Student freedom	0.154	0.051	2.991	0.003*	0.872	1.147
Creation of good habits	0.177	0.053	3.309	0.001*	0.747	1.339
Exams are conducted timely and publication of results is also on time	0.175	0.049	3.584	0.000*	0.680	1.472
Placement support	0.193	0.073	2.654	0.009*	0.681	1.469

Note. *Significant at the 1% level.

Table 9. Factors Influencing Students' Satisfaction Towards Courses : Stepwise Regression Results

Model	β	Std. Error	*t*	*p*-value	Tolerance	VIF
Constant	1.239	0.346	3.581	0.000*	-	-
Value addition to knowledge	0.298	0.069	4.341	0.000*	0.900	1.111
Potential for higher education	0.237	0.068	3.498	0.001*	0.899	1.113
Creation of employability	0.186	0.059	3.155	0.002*	0.939	1.065

Note. *Significant at the 1% level.

of 'value addition to knowledge' is largest followed by the 'potential for higher education' and 'creation of employability.'

Education infrastructure in the form of good buildings, classrooms, laboratories, and equipment are the essential components of learning environments in educational institutions. There is strong evidence that high-quality infrastructure facilitates better instruction, improves student outcomes, and reduces dropout rates, among other benefits (Teixeira, Amoroso, & Gresham, 2017). Teachers have a special responsibility to support students' freedom of expression that includes their freedom in discussion, expression, and educational attainment. Micro management in the classrooms with strict interferences by the teachers may cause a pushback and a surge in misbehavior among the students. Hence, before imposing rules, the teachers and students need to make a consensus about classroom management with mutual understanding to ensure a healthy learning environment (Ozer, 2013).

Examinations play an important role in imparting education and knowledge among the students. For the past many years, the universities in Kerala have not been quite prompt in meeting their exam schedule. The delay in the announcement of the results affects students' admission to further studies and applications for jobs. The results reveal that the students in the colleges were less satisfied with the existing examination system and they strongly demanded that the universities must follow the time line in conducting examinations and announcing results. The ultimate aim of many students pursuing higher education is to be placed in decent jobs by the end of the final year of their studies. Placement plays a very important role in any kind of higher education and the students expect that their institutions will arrange placement support to eligible candidates. However, the performance of the institutions covered under study is lagging much behind the students' expectations with respect to placement support.

Every educational institution expects to foster good habits among students. Education makes the mind so

powerful that one can conceive good ideas and thoughts. Here, higher education's objective is to warrant self-creation and an authentic life, inculcate the habit of thinking deeply, and the capacity to relate to others empathically. For example, the universities can help in making the students' environment-conscious through environmental engagement projects to instill thinking and living habits among students where environmentalism becomes core to the value-system of the next generation (Panwar, 2018).

Simply by increasing the graduation rates and the levels of educational attainment do not bring much value addition if the students do not learn something of lasting value. The value addition positively affects the self-confidence of the students and helps a lot to improve their overall development, particularly in communication and soft skills. The higher education institutions need to complement the curriculum to equip the students to meet the industry needs and to build up their interests and basic skills. The courses and programs being taught in the colleges today need to be modified and updated regularly with the demands of the industry, business, and the service sectors. This demands higher-level dialogue between the institutions, industry, and society. The undergraduate programs taught in the colleges should offer more options for the students to specialize later in specific areas. Hence, some of the existing undergraduate curricula have to be reconfigured so that the students can either advance further through a Master's or by entering in an industry or profession or develop specific skills on the job. Authentic professional experiences embedded in the curriculum with an internship in good institutions can help students to improve their communicative, managerial, and analytical skills. Integrating problem-based learning with real-life cases into the curriculum can make the students more employable at the workplace. In a nutshell, the higher education sector needs to be more student centric, employability oriented, and should enable the students to pursue further studies at an advanced level.

Discussion and Conclusion

The higher education system of Kerala, a state leading in literacy in India, has not advanced as much as one expects in a place, which has an almost universal standard of primary education and a reasonably expanded secondary education. In this context, the students' satisfaction towards educational services is paramount in designing and implementing the curriculum in universities and colleges. Students' experience and satisfaction influence student retention rates and contribute directly to the building of a good reputation of a university. Moreover, it enables educators in the state to upgrade the education system to attract prospective students into the system. Hence, this survey of 198 under graduate students of colleges in Kerala makes the gap analysis of students' expectations and satisfaction towards the higher education services and explains the major factors influencing their satisfaction towards the institutions and courses. This study looked at the various aspects of undergraduate students' experiences while pursuing Arts and Science programs in colleges affiliated to three major universities in Kerala. The study examines the differences between students' expectations and satisfaction level for a given survey instrument related to the institutional as well as course level performance.

The study shows that the colleges in Kerala are not performing up to the level of expectations of the students. The gap score between students' level of expectation and satisfaction towards the performance of the colleges in this research is within a range of 0.24 – 0.75, with the largest being placement support, timely conduct of examination, and adequate infrastructure, while the smaller gap concerns the course content, academic support, and creation of good habits. The gap score between students' level of expectation and satisfaction towards the courses pursued is within a relatively lower range of 0.22 – 0.57, where the difference is largest in better job prospects, imparting practical skills, and creation of employability and the least difference is in the potential for higher education. Nevertheless, the majority of the students were satisfied with their course content. Moreover, the gap analysis of performance reveals the statistical significance of all the items considered for the study. Again, the findings of this study suggest some measures to improve the performance of the education system, where

more weight is given to the good working of the placement cell, timely conducting of the examinations, and more freedom to the students in choosing courses. Thus, the overemphasis on academic knowledge production and little emphasis on formal skill development can be the reasons for the shortcomings in employability following the graduation of students in the state. The stepwise regression procedure finds the factors like infrastructure, student freedom, creation of good habits, timely conduct of examination, and placement support to be the strongest determinants of students' satisfaction towards the colleges or institutions. The value addition to knowledge, potential for higher education, and the creation of employability are the significant positive factors affecting the level of satisfaction of the students with respect to their undergraduate studies.

Managerial Implications

The findings provide some signs of the strength and areas needed for improvement on the part of the higher education system in its efforts towards delivering better services to the students. The strengths include the content of the syllabus, knowledgeable faculty, the potential for higher education, and value addition to knowledge. For the colleges, in order to further improve their services to the students, a special focus must be given to elite infrastructure, an efficient examination system, and an active placement support cell. These factors have higher relevance, particularly at the college level, and they certainly add to the overall experience and satisfaction of the students towards their undergraduate education.

Limitations of the Study and Scope for Future Research

Finally, we attribute many limitations to the study. This research measures the gap existing between the expectations and satisfaction of 198 undergraduate students selected from a single small state in India. No comprehensive coverage of the variables that potentially influence student satisfaction is made in this research. Besides, the findings of the research are mostly based on the classical parametric test procedures and OLS regression models. Expansion of sample space through adding samples from similar states of India, improving construct validity of the existing measure by correlating it with several other measures, and a more rigorous approach for the statistical data analysis can enhance the validity and significance of further studies on this issue. These are certainly valuable lines of future research.

Author's Contribution

Dr. T. G. Saji, the sole author of this paper, singularly conceived, designed, developed, prepared, and wrote the whole paper.

Conflict of Interest

The author certifies that he has no affiliations with or involvement in any organization or entity with any financial interest, or non-financial interest in the subject matter, or materials discussed in this manuscript.

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