Engineering Student Perceptions of Service Quality in Higher Education in Telangana and Andhra Pradesh

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Abstract—Engineering education is the highest developing administration in India. This investigation means to analyze apparent administration quality estimation scale to understudies; and to analyze the understudy fulfilment level in advanced education and furthermore endeavours to analyze the apparent administration nature of regulatory units, for example, administrations given by the organization. This investigation additionally intends to discover the idea of training and the administrations given by the establishments in Telangana and Andhra Pradesh and to know the hole between the desire and impression of understudies. This investigation significantly focuses on conclusive year understudies of the considerable number of schools in Telangana and Andhra Pradesh. The target of the investigation is to examine the instruction benefits that are given in Andhra Pradesh and Telangana, which help to improve the administrations and to make great effect over understudies and keep up a benevolent connection with colleges.
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Keywords: Higher education, Perception, Chi-square

1.   INTRODUCTION

Education is a significant facet of human development. Psychologically poor academic performance not only leads to learner's low self-esteem but also causes stress to the parents [1]. There is a lot of importance to education for the national development of the country. All over the country, the main aim is to increase the standard of education. Parents and government utilize a huge amount of money on educational system but the desired satisfaction to the students is not at all fulfilled. Teachers also complain of students of their low performances. The perceptions and desires of the students are different from what they had at present. Education at engineering is supposed to be best in both practical and theoretical and the foundation towards research and career development. It is an investment as well as an instrument that can be used to achieve more rapid development in the country. Students' perception is to be studied to fulfil their desired needs. The question, therefore, is the fee structure in the colleges. Is it high or low? Is the quality of education satisfactory? Present status of co-curricular and extra-curricular activities in the college? The function level of activities in the college? Whether placements in the college are satisfactory? The overall performance of the educational system is satisfactory or not?

Purpose of the Study
The study is about finding out whether there is a significant difference between the perceived expectations of the student and the satisfaction of the student's academic performance.

Research Questions
This research will attempt to answer the following questions:

1.   What is the perception of students on Quality and fee structure in the colleges?

2. What is students' perception on co-curricular and extra-curricular activities in the college?
3. What is the students' perception on the function level of activities in the college?
4. What is students' perception on changes should take place in the colleges?
5. What is the students' perception on college placement cell and training programs provided by the college?

2. LITERATURE REVIEW

Students can have poor academic performance, there are various reasons for student's poor academic performance based on the area they are living in, student's cultural and historical background [1].

Why Do High School Students Lack of Motivation in the Classroom?
In Study 1 (N = 351), an exploratory factor examination offered fundamental help for an academic motivation scientific categorization involving four measurements: capacity convictions, exertion convictions, attributes of the task, and value place do the task. In Study 2 (N =349), the proposed taxonomy was further corroborated through first and second request corroborative factor investigations, and its discriminant legitimacy and builds legitimacy were recorded. Study 3 (N = 741) offered proof for a model of the connections among social help (from guardians, educators, and companions), motivation, and academic results (e.g., accomplishment, academic confidence, aim to drop out). Results are considered regarding an expanded conceptual understanding of academic motivation, and suggestions for educational modules [2]. Poor school performance (PSP) "as a school achievement below the expected for a given age, cognitive skills, and schooling. They classify the causes of PSP into two macro groups; 1) pedagogical difficulties and 2) diseases and associated disabilities. It is believed that making students restricted to their interest might lead to lack of interest which in turn results in frustration, failure, low self-esteem besides family and school stress [3].

Rahmaneh (2012) investigates the causes of poor academic achievement among the students in the province of Al-Balqa, Jordan. 100 teachers were selected randomly to fill in a 30- item questionnaire. The results show that the reason for low academic performance falls under the following themes: the focus of the student (89.60%) was the first place followed by the school hub (79.00%) followed by the family [4].

Dite quality and Academic performance
Florence, M. D., Asbridge, M., & Veugelers, P.J. (2008). Diet Quality and Academic Performance. Journal of School Health Across various indicators of diet quality, an association with the academic performance was observed. Dite quality is inversely proportion to assessment. Girls performed better than boys. Children attending better schools and living in wealthy neighbourhoods also performed better [5].

Factors affecting the Child's Academic Performance and Socialization Processes in the Family

Krashen (2005) reported that students whose parents are well-educated score high grades than those whose parents were not educated. The communication will be better between parents and children if they are well educated. Anything regarding the school activities and lectures thought at school could be more often discussed with parents if they are educated.

Types of Family and Students' Academic Performance
Olayinka (2009) reported that the family is an important part of the society and that childhood depends majorly on a stable family. The poor economic conditions of the parents drove children towards undesirable challenges and responsible for their poor academic performance [6].

Family Size and Position in the Family
Griffitts estimated that the grades of children in small families are higher than those in large families. Damron study showed that though the children of small families achieve higher scores and grades compared to large families, the differences between them did not reach the expected level and are considered as negligible. Baseman concluded that family size; age and sex of siblings are responsible for the academic performance of the children.

Socio-Economic Status (SES) and Academic Achievement of Students
Caro, McDonald, and Willms, (2009), a study conducted on the relationship between the academic achievement and socio-economic status indicated that there is a large gap between the achievement of students from an SES background than with Non-SES background.

Parental Discipline Behaviors, Subjective Parental Situation Perceptions and Objective Characteristics of Discipline Situations.

The attempt is to explain parental discipline behaviours from an interactionism viewpoint of person and situation factors, the relationship of parental discipline behaviours to situation-specific feelings was examined. Data obtained from 300 families included (1) social demographic variables; (2) parental reactions, feelings, and cognitions in discipline situations; (3) family structure and climate; and (4) parental child-rearing value orientations. Two main patterns of discipline reactions were found. Children who brought up properly concentrate properly on studies [7].

3. METHODOLOGY

Research Design

The study adopted is a descriptive survey design. The mode of data collection is a survey method. The questionnaire contains questions regarding Demographic details contain questions about the basic information of student such as name, age and gender, department, parent occupation. The remaining questions mainly concentrate on details related to quality and standards of education

Population and Sample

The target population consists of All Engineering students in Andhra Pradesh and Telangana State. In all, 400 students were selected for the study through stratified random sampling.

Research Instrument

The main instrument designed for the study is a self-designed questionnaire on the perception of students' poor academic performance. The questionnaire contained two (2) sections; section A contains information on personal data of the respondents and section B requires responses of alternative options from the respondents. Options ranged from strongly agree to strongly disagree.

Method of Data Analysis and Discussion of Results

The data obtained were analyzed using frequency count and chi-square statistical analysis with the formula:

$$\chi^2 = \frac{(O-E)^2}{E}$$

Where X^2 = chi-square

O = observed frequency

E = expected frequency

Analysis of Data and Discussion of Result

Each of the research questions is answered below:

Research Question 1

What is the perception of students on the quality of education and fees structure?

Table 1: Perception of students on the quality of education and fees structure.

S.No	Variables	VH	H	M	L	VL	Total
1	Quality of Education Maintained in the College	11 (34.5)	63 (87)	208 (185)	78 (60)	40 (33.5)	400
2	Fees structure in college.	58 (345)	111 (87)	162 (185)	42 (60)	27 (33.5)	400

Expected frequencies are in brackets df = 4

Significance level = 0.05

Table value = 9.49

Calculated x value = 8.01

From table 1 above, calculated X (8.01) is less than table X (9.49). This indicates that students perceive that students' fees and quality of education affect poor academic performance among higher education students.

Research Question 2

What is students' perception on co-curricular and extra-curricular activities in the college?

Table 2: Perception of students on co-curricular and extra-curricular activities in the college

S/N	Variables	Yes	No	Maybe
1	Project works	249 (210)	60 (109)	46 (36.1)
2	Seminars	280 (228)	84 (118)	21 (39.2)
3	Workshops	272 (237)	82 (123)	46 (40.7)
4	Industrial tours	272 (253)	82 (131)	46 (43.5)
5	Expert talks/TED talks	163 (237)	198 (123)	39 (40.7)
6	Student fest/ tech fest	304 (237)	66 (123)	241 (40.7)

Expected frequencies are in brackets df = 10
Significance level = 0.05
Table value of X^2 = 18.31
Calculated X^2 value = 18.601
Since X^2 calculated (18.601) is greater than X^2 table value of 18.31, therefore students perceive student's co-curricular and extra-curricular activities in the college as having an impact on their academic performance.

Research Question 3
What is the perception of students on the function level of activities in the colleges**?**

Table 3: perception of students on the function level of activities in the colleges

	Variables	VG	G	M	B	VB
1	Cultural	95 (67.7)	153 (114)	90 (113)	4 (43)	21 (26.1)
2	Sports	77 (74.6)	118 (125)	127 (124)	47 (47.3)	31 (28.8)
3	Student interactions	63 (74.6)	121 (125)	139 (124)	51 (47.3)	26 (28.8)
4	Academic- Industrial interface	42 (74.6)	81 (125)	136 (124)	89 (47.3)	52 (28.8)
5	Library	129 (74.6)	152 (125)	92 (124)	18 (47.3)	9 (28.8)
6	Student training and development	61 (74.6)	134 (125)	128 (124)	53 (47.3)	24 (28.8)
7	Student welfare	48 (74.6)	105 (125)	146 (124)	65 (47.3)	36 (28.8)

Expected frequencies are in brackets df = 24
Significance level = 0.05
Table value of X^2 = 36.42
Calculated X^2 value = 16.4924
Since X^2 calculated (16.4924) is less than X^2 table value of 36.42, this indicates the perception of students on the function level of activities in the colleges does not influence students' academic performance.

Research Question 4
What is students' perception on changes should take place in the colleges?

Table 4: perception on changes should take place in the colleges

S.No	Variables	Yes	No
1	Fees structure	174 (234)	226 (166)
2	Quality of education	260 (234)	140 (166)
3	A well qualified and trained facility	230 (234)	170 (166)
4	Industry orientated courses	293	107

		(234)	(166)
5	Placement level in college	211 (234)	189 (166)

Expected frequencies are in brackets df = 4
Significance level = 0.05
Table value of X^2 = 9.49
Calculated X^2 value = 9.598
Since X^2 calculated value of 9.59 is higher than X^2 tabulated value of 9.49, this shows that students perceive that changes should take place in the college's influence students' academic performance.

Research Question 5
What is students' perception on Overall how satisfied or dissatisfied were you with your experience at your college and placements

Table 5: Overall how satisfied or dissatisfied were you with your experience at your college and placements

S.No	Variables	HS	S	N	D	SD	TOTAL
1	Placement	54 (34)	146 (142)	111 (140)	62 (59.5)	27 (24.5)	400
2	Experience at the college	14 (34)	137 (142)	170 (140)	57 (59.5)	22 (24.5)	400

Expected frequencies are in brackets df = 4
Significance level = 0.05
Table value of X^2 = 9.49
Calculated X^2 value = 6.07
Since X^2 calculated value of 6.07 is less than X^2 tabulated value of 9.49, this shows that students perceive that Overall how satisfied or dissatisfied were you with your experience at your college and placements do not influence students' academic performance.

4. RESULTS

For research question 1, those students perceive "students' fees and quality of education affects poor academic performance among higher education students". So the proper fees regulation with the quality of education is to be maintained to satisfy the students. The present fee structure is moderate and high but the quality of education is just moderate.

For research question 2, where students perceive "student's co-curricular and extra-curricular activities in the college as having an impact on their academic performance". By providing the co-curricular and extra-curricular activities in the college, the motivation among the students will be developed which results in the improvement of the student's performance.

For research question 3, indicate perception of students on "function level of activities in the colleges does not influence students' academic performance". Even though the functional activities are provided to students, it does not create much impact on the educational system.

For research question 4, shows that students perceive that "changes should take place in the college's influence students' academic performance". The changes such as Fees structure, Quality of education, well-qualified and trained facility, industry orientated courses and Placement level in college will improve the performance of students.

Finally, for research question 5, where students perceive that "the overall estimation of how satisfied or dissatisfied were you with your experience at your college and placements do not influence students' academic performance". Even though the placement is good it does not influence student performance.

5. CONCLUSIONS

The present expense structure is moderate and high yet the nature of instruction is simply moderate. By giving the co-curricular and additional curricular exercises in the colleges, the inspiration among the understudies will be created which

results in the improvement of the understudy's performance. Even, however, the utilitarian exercises are given to understudies, it doesn't make much effect on the instructive system. The changes, for example, Fees structure, Quality of training, all around the qualified and prepared office, industry orientated courses and Placement level in school will improve the execution of students. Designing Students in Telangana and Andhra Pradesh see that the Quality of Education is low even the charges are looked after high. In this way, the discernment can be changed either by nature of instruction or the expense structure are to be altered. Designing Student sees that the co-educational modules exercises, for example, ventures, classes, workshops and TEDx programs are making an effect on the scholastic execution. Along these lines, the co-educational program's exercises are to be available. The adjustments in the school, for example, expense structure, quality and industry-arranged projects are seen vital by the designing understudies. Along these lines, the hole is decreased by the legitimate charge structure and nature of training. Designing Students, sees that the arrangement does not impact general fulfilment. By this paper on Engineering Student Perceptions of Service Quality in Higher Education in Telangana and Andhra Pradesh, it very well may be reasoned that there is a general disappointment on the nature of Higher training.

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Dr Mayuri Chaturvedi is a lecturer and a corporate trainer. She obtained her PhD in Humanities & Social Sciences from Indian Institute of Technology Kanpur (IITK) and Senior Research Fellowship (SRF) award by UGC- New Delhi. Her PhD thesis deals with status, issues and life of "Single Women Managers in Urban India." She has published nearly 20 research papers and attended a number of conferences at the national and international levels. She has supervised more than 50 MBA research projects and papers. She is actively associated with international publishing houses such as Pearson Education as a reviewer and content writer. She has also served as a resource person for UGC Faculty refresher courses and short-term courses. She is a panel member of the National Science Concurs for school children. She is a life member of the Indian Science Congress (ISC) and the Indian Association for Women's Studies (IAWS).

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