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STATISTICAL RELATION BETWEEN A PUBLIC UNIVERSITY AND A PRIVATE UNIVERSITY BASED ON THE EVALUATION DONE BY THE RESPECTIVE STUDENTS

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ABSTRACT

This research is a statistical study on the current status of a public university versus a private university which is evaluated by the students studying in the respective institutions. It has been found a low degree positive correlation amongst these universities which can be attributed to a healthy outcome as on date. This was done through a formal survey based on a questionnaire conducted and the data was collected from both public university and a private university. Data analysis was done using Spearman rank correlation method. Also this data can be used to identify particular aspects which will improve the Universities performance yielding a positive result for the institution. The outcome of this research can serve as a reference for any university for its improvement plans & procedures.

INTRODUCTION

Universities play gradually more significant role in modern society. In the last two decades, higher education worldwide has moved from local to global level. Universities have become the sources of new knowledge and innovative thinking citizens, providers of trained personnel, credible suppliers to innovation, attractors of business investment and contributors to social and cultural vitality. The students who opt for higher studies or research related work have to find the right University suitable to their aspirations and budget constraints. Nowadays we see more private universities in the media catching the attention of the students. So the onus lies on the students and their parents to make a correct choice.

However choosing a right university draws many points to the forefront and debate about public universities versus private universities continues. There are some differences that set them apart and even a private University may share similarities of a public University (and vice versa). There are several individuals who consider a private university a career boost from the start, regardless of how its programs rank nationally. Similarly there are some people who think public universities are better considering their past performance

PARAMETERS / QUESTIONNAIRES CONSIDERED FOR THE SURVEY

Though there are many parameters can be considered, for this research study mainly 14 pointers listed which at this point of time are the right choices. The fourteen pointers are:

Funding & Tuition cost, Class size & demographics, Program offerings, Research opportunities
Campus life, Placements, Affiliations, Faculty expertise, Academic excellence, Merit scholarships, University result, Teaching aids, Infrastructure & Curriculum

Here an attempt is made to find the correlation between the public University and private University based on their common parameters. The evaluation of the University parameters is done by the students themselves through a detailed questioner and suitable ranking are assigned for mathematical calculations

SCOPE OF THE STUDY

The Scope of the study is to identify whether any statistical correlation exists between the public University and private University based on their common parameters. Also to list out the areas where an immediate intervention required improving the University performance which directly enhances the student's and institution's progress as a whole.

SAMPLING DESIGN & DATA COLLECTION

The data is collected through questionnaire method. The questionnaire list contains well listed 14 pointers relating to the University's facilities & competencies perceived and experienced by the students who are

International Journal OF Engineering Sciences & Management Research

studying in that university. The survey is done separately on 50 students each from a public university and a private university in Karnataka, India.

LIMITATIONS & FURTHER SCOPE OF THE STUDY

1. The study is limited to only one public University and one private University in Karnataka, India, Further it can be extended to collect more data & survey from other Universities.
2. The study & survey can be further enhanced by collecting more data.
3. Also the study can be extended to different states in India.

DATA ANALYSIS & CALACULATIONS

Table 1.1

Ratings assigned to the Public university evaluation

Ratings	Score	Ranks
Poor	0 - 1	1
Fair	1 - 2	2
Good	2 - 3	3
Very good	3 - 4	4
Excellent	4 - 5	5

Table 1.2

Ratings assigned to the Private university evaluation

Ratings	Marks	Ranks
Poor	0 - 1	1
Fair	1 - 2	2
Good	2 - 3	3
Very good	3 - 4	4
Excellent	4 - 5	5

Table 1.3

Teacher's evaluation questionnaire & the ratings obtained

S.no	Parameters	Public university	Private university	Public university Ranking - R1	Private university Ranking - R2	Deviation d = R1 - R2	Square deviation d ²
1	Funding & Tuition cost	4.6	2.5	1	13	-12	144
2	Class size & demographics	4.5	4.8	2	2	0	0
3	Program offerings	4.3	4.5	4	7.5	3.5	12.25
4	Research opportunities	4	4.1	8	9	1	1
5	Campus life	4.4	4.9	3	1	2	4
6	Placements	4	4.5	8	7.5	0.5	0.25
7	Affiliations	4.1	3.9	5	11	6	36
8	Faculty expertise	3.9	4.7	10	3.5	6.5	42.25
99	Academic excellence	4.2	4	6	10	4	16
10	Merit scholarships	2.5	1.8	14	14	0	0
11	University result	2.7	4.6	13	5.5	7.5	56.25



International Journal OF Engineering Sciences & Management Research

12	Teaching aids	4	4.6	8	5.5	2.5	6.25
13	Infrastructure	3.6	4.7	11	3.5	7.5	56.25
14	Curriculum	3.3	3.8	12	12	0	0
	Total						374.5

Calculation based on Spearman rank correlation

$$r = 1 - \frac{6 \sum d_i^2}{n(n^2-1)}$$

$$r = 1 - \frac{6(374.5)}{14(14 \times 14 - 1)}$$

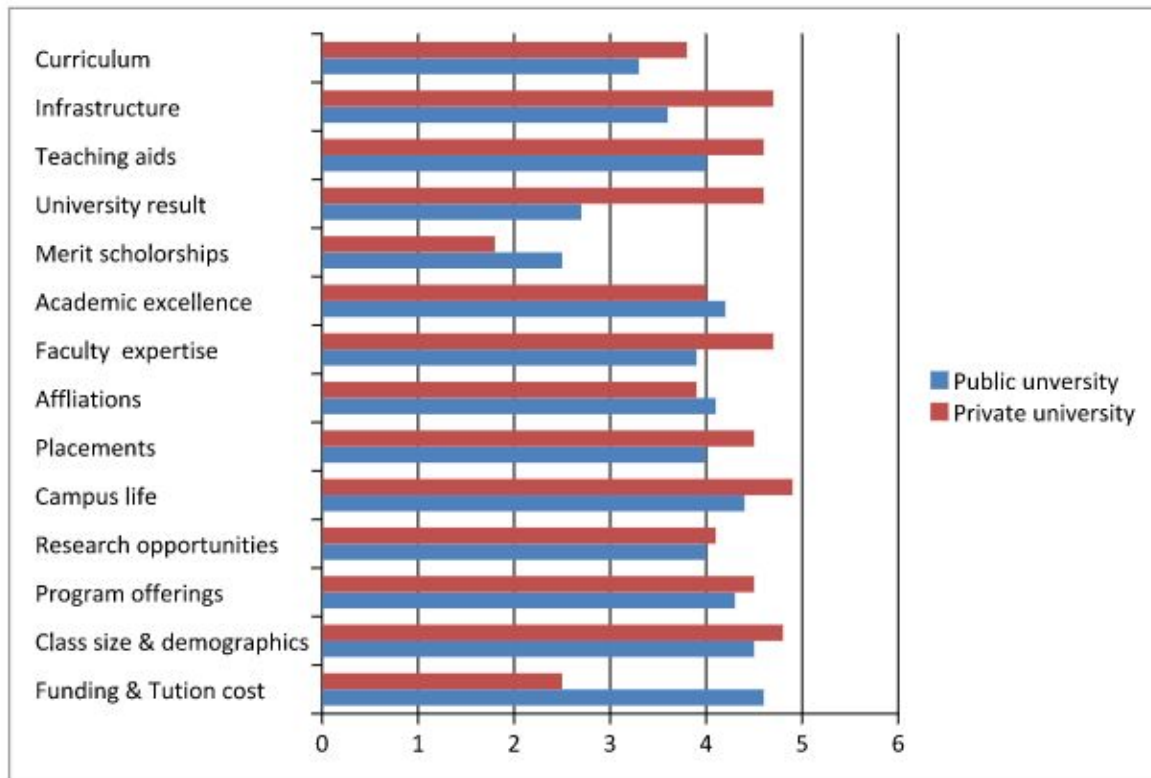
$$r = 1 - \frac{2247}{14 \times 195}$$

$$r = 1 - 0.8230$$

$$r = 0.177$$

Comment -- Low degree positive correlation

GRAPHICAL REPRESENTATION OF THE DATA




CONCLUSION

From the above survey and the correlation method we observed a positive low degree correlation. This shows that there exist still similarities and equalities between a private university and a public university. However this may not exist if there is a drastic change in-terms of the respective universities parameters change rapidly, which is very unlikely. Whatever the course one is planning to do and considering any type of university, it is always better to make a university visit. Keep the options open and one should not finalize any university until find out the facts for oneself by talking to students, faculty, management, and administration. Also one has to weigh the pros and cons before finalizing any university.

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