

**A Comparative Study of Preferences of Students
between Public and Private School in Patna**

CPE 2019



**PATNA WOMEN'S COLLEGE
PATNA UNIVERSITY**

3rd Cycle NAAC Accredited – 'A' grade with CGPA 3.58/4

"College with Potential for Excellence" (CPE) Status Accorded by UGC

DEPARTMENT OF STATISTICS

Supervised by:

Submitted by:

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DEPARTMENT OF STATISTICS

CERTIFICATE

This is to certify that the research project entitled “**A COMPARATIVE STUDY OF PREFERENCES OF STUDENTS BETWEEN PRIVATE AND PUBLIC SCHOOL IN PATNA**” submitted by Department of Statistics, 2017 - 20 is the project of their genuine work.

This project was undertaken by them under the “CPE, UGC 2019”. They did so much effort which is appreciable. I congratulate them on the completion of the project and wish them all the best for their bright future.

Under the Supervision of :

Head of Department

ACKNOWLEDGEMENT

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Making this project report was an interesting job. Many people are helped in the research and making report. This research completed with the help of many people and we are thanking those who helped us directly or indirectly in completion of this project report.

Primarily we would thank God for being able to complete this project with success.

We would like to express our special thanks to Dr. M. Rashmi A.C., Principal, Patna Women's College, Patna who has been given the opportunity to do research and give the approval letter for collecting data.

Then we would like to deeply thank our supervisor, Assistant Professor, Department of Statistics for providing us the outmost support and thank our Head of Department, Statistics and our respected faculty members.

Last but not the least we would like to thank our parents and friends who have helped me with their valuable suggestion and guidance.

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INTRODUCTION

There is no doubt that the learning has been directly linked with the school where persons learn everything related to his career and character. The school is particularly and specifically arranged so as to facilitate effective learning (S. B. Owaduge, 2015). In these days population is increasing day to day due to this reason many private and public schools are opening in many places but teaching qualities of schools are not uniform in all schools. Somewhere teaching qualities are low, somewhere teaching qualities are medium and somewhere teaching qualities are high and its effect on students. Not only teaching qualities are different but also many problems prevailed in school like buildings in chronic conditions, lack of good furniture, inadequate school materials, less teaching and non-teaching staff, teacher's salaries and other allowances are not proper according to their qualifications and not paid timely. Whether it is either private school or public school. Schools have not been inspected regularly by supervisory staffs from government level, even lack of disciplines in many schools. There is always a keen competition between those two categories of schools and it is difficult to decide which one has an edge over other. Keeping above points in mind we first had verbal opinion of some students but found variant views. So, we decided to have a detailed survey of students to this effect and make a comparative study among different opinions. The schools located at urban levels are having better infrastructure than rural level schools and effort will be made as to take opinion to this effect in our opinion survey.



Sample Survey: In a sample survey, only a part of the total population is approached for information on the topic under study. These data are then “expended” or weighted to represent the target population as a whole.

Population: An aggregate of the measurements or counts obtained from the objects or elements possessing some common or specified characteristic, is called a population.

Stratified Random Sampling: The sampling technique which will effectively reduce the population heterogeneity. One such technique is stratified sampling. Selection of sample from different strata randomly is called stratified random sampling. Stratification means division into layers on some predefined rules or past experience or any other information related to the character under study may be used to divide the population into various groups such that

1. Unit within each group are as homogeneous as possible.
2. The group means are as widely different as possible.

Stratified random sampling allows to obtain a sample from the population that best represent the entire population being under studied.

Stratified random sampling differ from simple random sampling, which involves the random selection of data from an entire population, so each possible sample is equally likely to occur.

Objectives : The objective of the study is to find whether any significant differences exist between private and public schools. For this we collect the data regarding basic infrastructure, level of teachers, teacher strength

in school, tutorial classes, library, sports, transport and like facilities prevailed in the private and public secondary schools.

Defining the population to be sampled: The objective of the study is to find whether any significant differences exist between private and public schools. For this we collect the data regarding basic infrastructure, level of teachers, teacher strength in school, tutorial classes, library, sports, transport and like facilities prevailed in the private and public secondary schools.

Instrument for Data Collection: An important part of the sample survey, i.e., the data was collected using a questionnaire finalized after pre test which includes informed consent. The questionnaire helped the researcher to collect the extensive information regarding the objective of the study.

Method of Data Collection: The two commonly applied methods for data collection are interview method (investigator goes to different places and personally interviews the individuals) and mailed questionnaire method (the questionnaire is mailed to the individuals who are required to duly fill it up and return them back to the investigators). We have used of interviewing the students of both types of schools after giving his consent on the permission of school's principal. For taking permission from principal of different schools, authorisation letter were given issued by principal of Patna Women's College, Patna.

Non-responses: Sometimes candidates will not give the data regarding the survey or candidate will not response. Non-responses lead to an

increase in error as a result of reduction in actual size of the sample. In such cases investigator has to handle it.

Selection of Sample and Sampling Technique: A stratified random sampling with proportional allocations technique was used for the study . All secondary Schools in Patna were divided into four strata namely Patna East, Patna Central, Patna West and Phulwari Sharif. There are 120 samples from both types of secondary schools were selected in which 62 samples are selected from private secondary schools and 58 samples are selected from public secondary schools.



RESULTS AND DATA ANALYSIS:

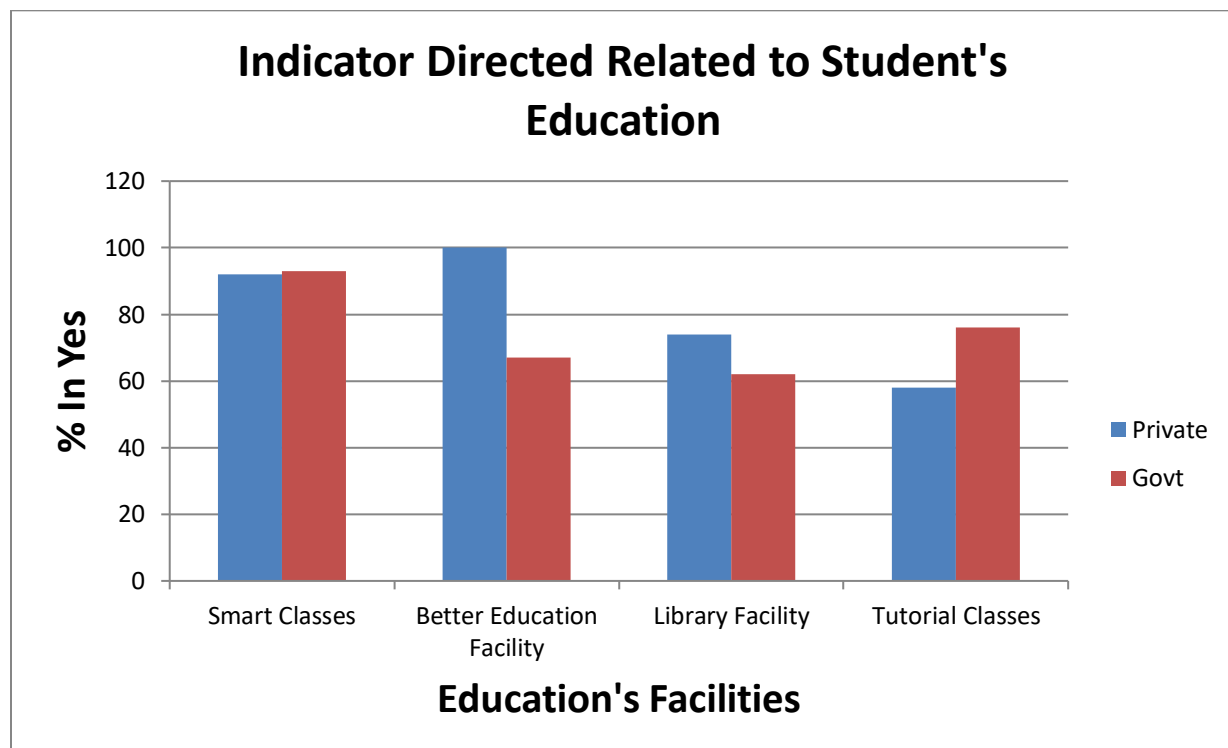
Four tables were prepared for the data analysis, Table 1 showing the percentage of ‘yes’ and ‘no’ for different indicators in both types of schools, Table 2 showing different types of schools with respect to place of residence of the students, Table 3 showing different income groups of parents of students preferring different types of schools and Table 4 indicates the Parent Teacher Ratio in both types of school.

Table 1: Percentage of ‘yes’ and ‘no’ for different indicators in both types of school

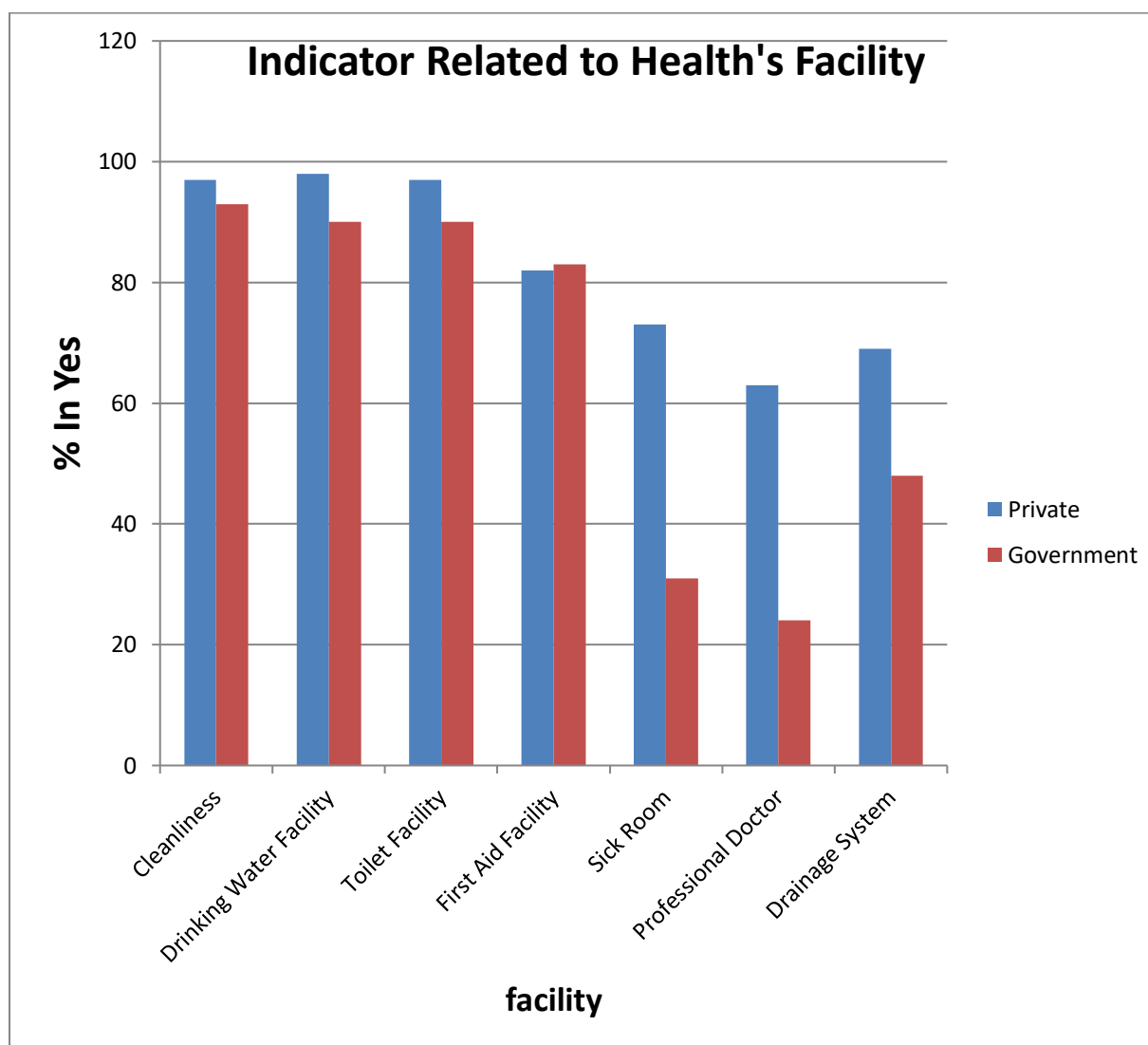
Indicator	Private (62)				Government (58)			
	Yes	%	No	%	Yes	%	No	%
Smart Classes	57	92	5	8	54	93	4	7
Cleanliness	60	97	2	3	54	93	4	7
Drinking Water Facility	61	98	1	2	52	90	6	10
Toilet Facility	60	97	2	3	52	90	6	10
Better Education Facility	62	100	0	0	39	67	19	33
Library Facility	46	74	16	26	36	62	22	38
Tutorial Classes	36	58	26	42	44	76	14	24
Sports Facility	47	76	15	24	46	79	12	21
Sports Teacher	43	69	19	31	31	53	27	47
Outdoor Game	41	66	21	34	39	67	19	33
Indoor Game	51	82	11	18	37	64	21	36
Cultural Activities	51	82	11	18	47	81	11	19
Transport Facility	48	77	14	23	25	43	33	57
First Aid Facility	51	82	11	18	48	83	10	17
Sick Room	45	73	17	27	18	31	40	69
Professional Doctor	39	63	23	37	14	24	44	76
Drainage System	43	69	19	31	28	48	30	52

The table shows that except some instances, percentage of different indicators as shown in Table 1 is higher in private schools than in public schools.

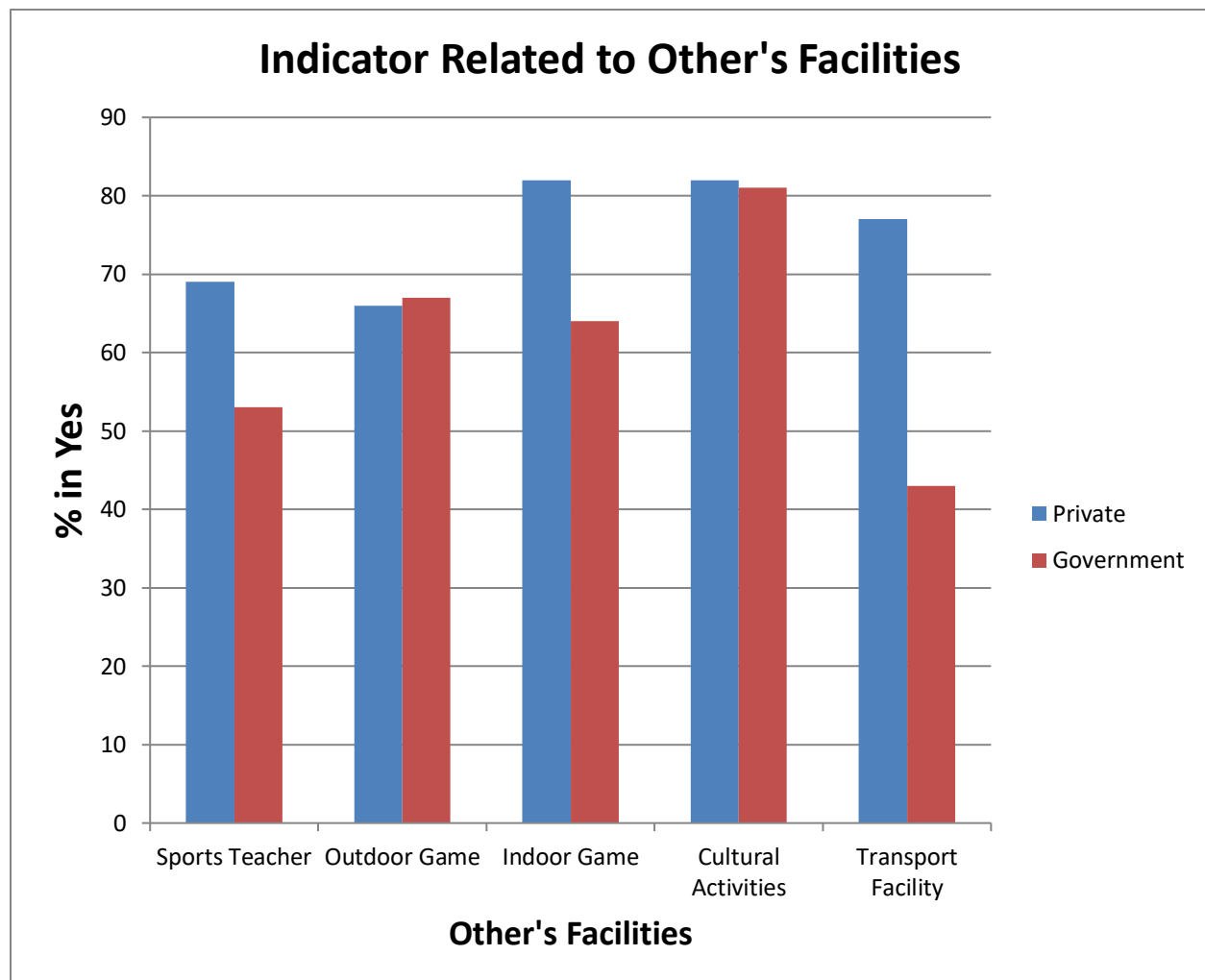
Graph showing the percentage of the education's facilities in schools



Graph showing the percentage of the health's facilities in schools



Graph showing the percentage of the other's facilities in schools



Graph showing preferences of school with respect to parent's income

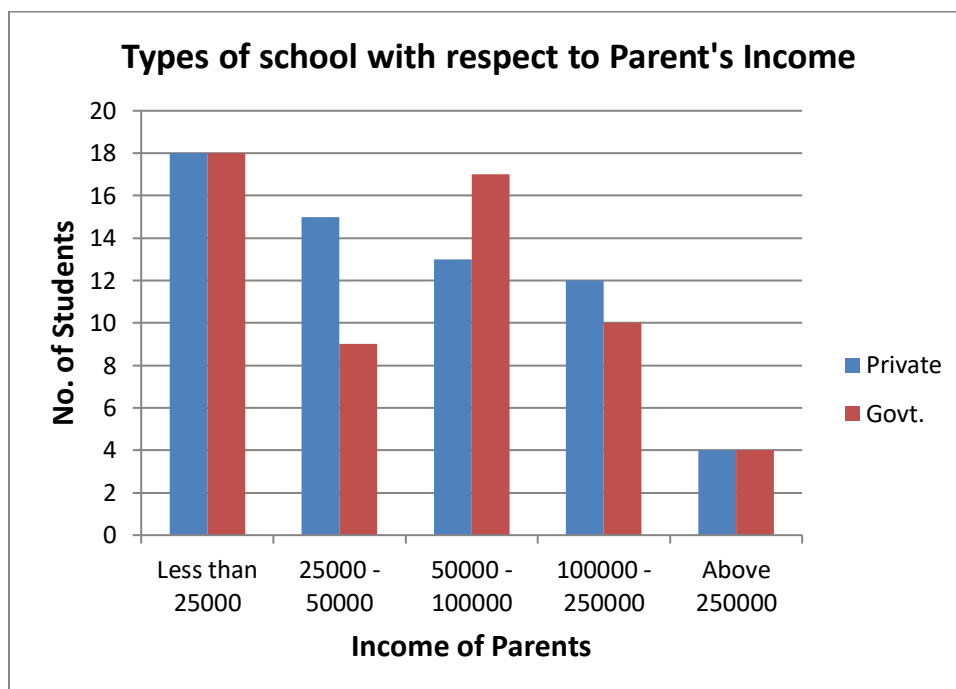


Table 2: Different types of schools with respect to place of residence of the students

↓ Residence \ School →	Private	Govt.	Total
Rural	26	30	56
Urban	36	28	64
Total	62	58	120

The value of calculated $\chi^2 = 1.15$ which is less than the tabulated $\chi^2 = 3.841$ at $(2-1)(2-1) = 1$ d.f. and 0.05 level of significance. It shows that null hypothesis is accepted and we conclude that place of residence is independent of students preferring to study in different types of schools, i.e., there is no relation between place of residence and types of school preference of students.

Table 3: Different types of school with respect to different income group of parents of students

↓ Income \ School →	Private	Govt.	Total
Less than 100000	46	44	90
100000 - 250000	12	10	22
Above 250000	4	4	8
Total	62	58	120

The value of calculated $\chi^2 = 0.930$ which is less than the tabulated $\chi^2 = 5.991$ at $(3-1)(2-1) = 2$ d.f. and 0.05 level of significance. It shows that there is no evidence against the null hypothesis and we conclude that the income of parents is independent of students preferring to study in different types of schools, i.e., there is no relation between different level of income of parents and types of school preference of students.

Table 4: Pupil Teacher Ratio (PTR) in both Private and Public Schools

↓ School \ PTR →	Private	Govt.	Total
PTR < 35*	8	25	33
PTR > 35	54	33	87
Total	62	58	120

*As per Section 25(1) of The Right of Children to Free and Compulsory Education Act, 2009 (No. 35 of 2009), the Pupil Teacher Ratio (PTR) at least one should be deployed for every thirty five children for sixth to eighth classes.

The value of calculated $\chi^2 = 13.71$ which is greater than the tabulated $\chi^2 = 3.841$ at $(2-1)(2-1) = 1$ d.f. and 0.05 level of significance. It shows that null hypothesis is rejected and we conclude that Pupil Teacher Ratio is maintained in the private school whereas Pupil Teacher Ratio is not maintained in the public school.

Conclusions

The study helps us to understand the differences between private and public schools regarding basic infrastructure, teaching qualities, PTR and basic structure of the public schools. The study will provide information for parents, stake holders and school administrators to focus on various indicators that help students in achieving their academic goals. The study also investigates in introducing those factors which may lead to enhancing student's educational performance in the school. The findings of this study shall also useful to government administrators and parents in understanding the influence of school environment on academic achievement of students in schools. The study will also show the importance to students themselves to be aware of the effects of school environment on their academic performance. Lastly, the study will provide as the reference to other researchers who aims to in the present area of research.

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