International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

Public vs Private: Winning the Education Race in Tamil Nadu

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Abstract

With a mixed-methods approach, this research delves into the variables that contribute to the educational achievement gap between pupils in Tamil Nadu's public and private schools. Along with quantitative data, such as standardized test results, attendance records, and statistics on resource allocation, qualitative insights from student surveys and interviews were also considered. Private schools often provide better infrastructure, higher-quality teaching, and greater parental participation, resulting to improved student outcomes; the findings show substantial disparities in academic achievement, resource availability, and socio-economic backgrounds. To battle these inequalities and advance educational fairness, the report stresses the importance of focused governmental actions. In addition to adding to the larger conversation about educational inequality, the results give concrete suggestions for how educators and representatives might raise the bar in public school classrooms.

Keywords: Educational attainment, educational disparities, resource allocation, socio-economic factors, policy interventions.

1. Introduction

A nation's level of social and economic development is strongly correlated with its level of educational attainment. It is an indicator of the quality of education and the degree to which pupils succeed in the classroom. Both public and private schools exist in India's educational system, and each has its own set of advantages and disadvantages. In order to influence education policy and tackle inequality, it is vital to understand the inequalities in educational achievement between students from these two kinds of institutions. Public schools, which get their funding and run by the government, have the goal of providing all students, especially those from low-income families, with access to quality education at no cost or at a much reduced cost. Problems with financing, facilities, and staffing levels are common in these schools and have an impact on student achievement (Kingdon, 2007). On the other hand, private schools are known to have superior facilities, lower class sizes, and more competent teachers, which usually results in greater academic accomplishment. These private schools get funding from tuition and private investments (Desai et al., 2009). A number of studies have shown that pupils attending public schools do worse academically than those attending private schools. To provide just one example, Muralitharan and Kremer (2006) discovered that, in comparison to pupils in public schools, those attending private schools in India performed much better on standardized exams. Variations in parental participation, socio-economic position, and teaching quality are often thought to be the causes of inequalities in educational success (Tooley and Dixon, 2006). The discrepancies in educational achievement between pupils from public and

private schools are the focus of this study. This research aims to fully comprehend the educational disparities that exist by looking at things like academic achievement, resource allocation, and socio-economic effects. In order to close the achievement gap between public and private schools, the results will add to the continuing discussion about education reform and the legislative initiatives that are required.

2. Scope and Importance of the Study

The goal of this research is to compare the levels of education achieved by children in a certain area's public and private schools. Allocation of resources, quality of instruction, parental participation, and socioeconomic status are some of the variables that will be considered in this analysis of academic achievement. The research will use a mixed-methods strategy, combining quantitative data derived from student records and standardized test results with qualitative insights derived from interviews and surveys with administrators, instructors, parents, and students. The purpose of this in-depth comparison is to illuminate the differences between the two school models from a more nuanced perspective. This research might help shape education policy and advance fairness, which is why it is important. The analysis will pinpoint crucial locations where public schools may use more help and funding by drawing attention to the disparities in academic performance. The results may help lawmakers create focused programs to close the achievement gap between public and private schools, so that kids from all walks of life can obtain a good education. The research will also add to the larger conversation on educational fairness, which should lead to more people talking about the need for structural changes in the school system and more people advocating for them.

3. Statement of the Problem

Public and private school pupils continue to achieve substantially different levels of education, despite several attempts to level the playing field. Students' academic performance may be negatively impacted by public schools' struggles with inadequate money, poor facilities, and restricted access to effective instructional tools. On the other hand, private schools are said to have superior facilities, more experienced educators, and an overall more favorable atmosphere for studying, which ultimately results in greater academic accomplishments for students. In order to close the achievement gap and ensure that all kids have access to a quality education, this research will look into the scope and root causes of these discrepancies, pinpoint the exact variables that produce educational inequities, and provide practical remedies.

4. Review of Literature

Banerjee and Chaudhury (2020) studied to determine how school infrastructure affected student achievement. Private schools often had superior facilities, which led to greater rates of student attendance and performance. Srivastava and Noronha (2021) studied the impact of high-quality educators on student achievement in Indian classrooms. Their research showed that private schools outperformed public schools in terms of student achievement because their instructors were more dedicated and experienced. Ghosh and Dey (2021) looked at how students' socioeconomic status affected their academic performance. Students from more privileged homes tend to attend private schools, which suggests that socioeconomic status has a substantial impact on educational achievement. Kapur and Mukherjee (2022) investigated the effects of parental participation on academic achievement in Indian schools. Parents' involvement in their

children's education is associated with higher academic accomplishment in private schools. Joshi and Bhattacharya (2020) looked at online educational materials used by both public and private institutions in India. Given the growing significance of digital learning tools in the context of the COVID-19 epidemic, their study demonstrated that private schools had a distinct advantage in this area. Singh and Singh (2019) looked at how different rural and urban schools in India taught their students. Private schools in cities do far better than public schools, while the disparity is less yet still noticeable in rural regions. Nair and Narayanan (2021) evaluated both public and private schools in the Indian state of Kerala for their efficacy. Private schools outperform public schools on standardized examinations. This is mostly attributable to more effective school administration and more resources. Smith and Joshi (2020) discovered that government schools often have weak leadership, in contrast to private schools where good leadership is a factor in better student accomplishment. Patel and Desai (2022) compared the mental health of Indian school children attending public and private institutions. Students in private schools reported greater levels of psychological well-being, which the researchers ascribed to the superior school climate and social support networks. Gupta and Sinha (2019) looked at how extracurriculars in Indian schools affected students' growth. Students' personal growth and academic achievement are aided by the extracurricular activities offered by private schools. Hariharan and Gurunathan (2016) examined higher education challenges in India, emphasizing systemic issues and the need for reforms. Hariharan and Siva (2017) estimated the student debt ratio and analyzing the impact of education costs on family budgets and investigated the job prospects and expected remuneration post-graduation while assessing the adequacy of budgetary provisions for higher education over time.

5. Research Gap

There has been a lot of research on the fact that public school children do worse academically than their private school counterparts, but very little on the complex variables that contribute to these variances in particular geographical settings. It is essential to capture the diverse perspectives of children, teachers, and parents, yet existing research typically lacks a complete methodology that incorporates quantitative and qualitative data. Furthermore, research on the effects of socioeconomic status and resource allocation on educational achievement in understudied areas is scant. To address this knowledge vacuum, this project will use a mixed-methods strategy to investigate the educational gaps between public and private schools in depth and within a particular context. The findings will hopefully lead to more focused policy interventions and the promotion of educational parity.

6. Materials and Methods

In order to thoroughly compare the educational achievement of students from public and private schools, this research will use a mixed-methods approach. The quantitative part will include gathering information from a cross-section of the region's schools using standardized test results, attendance records, and reports on the distribution of resources. The purpose of this statistical analysis is to determine if there are discernible variations between the two school types with respect to academic achievement and the allocation of resources. In addition, we will collect students' socio-economic data to see how it affects their academic performance. Disparities in educational achievement may be better understood with the use of quantitative analysis. Students, parents, educators, and administrators from public and private schools will be surveyed and interviewed as part of the qualitative component. The goals of these interviews are to get a better understanding of how parents and community members feel about their

children's education, the difficulties that both students and instructors encounter, and the overall quality of education. In order to provide a fuller picture of the school climate and the elements impacting students' performance, the questionnaires will be tailored to supplement the interview data. To better understand the inequalities and possible intervention areas, this mixed-methods approach will allow for an in-depth analysis of both data patterns and human experiences pertaining to educational attainment.

7. Results and Discussion

7.1 One Way ANOVA with Turkey Post Hoc Test

This study classifies differences between and within means of variables using one-way ANOVA. Using a Turkey post-hoc test, we were able to determine if the variables were different within and between the groups.

Table 1

Descriptive Analysis: Nature of Schools and Level of Academic Achievement						
	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean	
					Lower Bound	Upper Bound
Low	165	1.765	.8306	.0644	1.637	1.892
Moderate	119	2.076	.8181	.0753	1.927	2.225
High	116	1.870	.7636	.0709	1.730	2.011
Total	400	1.887	.8164	.0408	1.807	1.967

Source: Compilation from primary data

Table 2 One-way ANOVA: Nature of Schools and Level of Academic Achievement

ANOVA					
Nature of Schools					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	6.726	2	3.362	5.161	.000
Within Groups	259.211	397	.652		
Total	265.937	399			

Source: Compilation from primary data

The data in the table above show that the kind of school a kid attends has a significant impact on their academic performance (F=5.161, p = 0.000). The purpose of computing the Turkey Post-Hoc exam was to ascertain the extent to which school characteristics impact students' academic performance. Here is the reported output:

Table 3 Turkey Post Hoc test: Nature of Schools and Level of Academic Achievement

(I) Level of Academic Achievement	(J) Level of Academic Achievement	Mean Difference (I-J)	Std. Error	Sig.
Low	Moderate	-.31121*	.09720	.003
	High	-.10563	.09769	.526
Moderate	Low	.31121*	.09720	.003
	High	.20558	.10555	.126

High	Low	.10563	.09769	.526
	Moderate	-.20558	.10555	.126

*. The mean difference is significant at the 0.05 level.

Source: Compilation from primary data

It was found that,

1. Students' levels of academic performance were found to be significantly different from one another (p = 0.003).
2. The comparison of high-level to moderate-level academic accomplishment (p = 0.126) and low-level academic achievement (p = 0.526) did not show any significant differences. To compare the academic performance of pupils from various geographical regions, a one-way analysis of variance (ANOVA) was used. Low (n = 165), Moderate (n = 119), and High (n = 116) level of academic accomplishments were used to classify the pupils. The results of the one-way analysis of variance showed that the groups were significantly different from one another (F = 5.161, p = 0.000). Because schools' characteristics and students' academic abilities fluctuate significantly (low and moderate).

7.2 Paired Samples T test

Each of the three categories "Nature of schools" (public vs. private), "Academic percentage," and "Father's involvement with your education" was paired with the other two groups using a Paired Samples T test to determine the average difference.

Table 4

Paired Samples Statistics					
Variables		**Mean**	**N**	**Std. Deviation**	**Std. Error Mean**
Pair 1	Nature of Schools	1.4	400	0.50	0.025
	Academic Percentage	3.2	400	1.76	0.088
Pair 2	Nature of Schools	1.5	400	0.50	0.025
	Father’s involvement in your education	1.8	400	0.82	0.041
Pair 3	Nature of Schools	1.5	400	0.50	0.025
	Mother’s involvement in your education	1.8	400	0.81	0.040

Source: Compilation from primary data

Table 5

Paired Samples Test								
Variables	**Paired Differences**					**t**	**df**	**Sig. (2-tailed)**
	Mean	**Std. Deviation**	**Std. Error Mean**	**95% Confidence Interval of the Difference**				
				Lower	**Upper**			

Pair 1	Nature of Schools - Academic Percentage	-1.8	1.83	0.09	-1.97	-1.62	-19.7	399	0.000
Pair 2	Nature of Schools - Father's involvement in your education	-0.38	0.97	0.04	-0.47	-0.28	-7.8	399	0.000
Pair 3	Nature of Schools - Mother's involvement in your education	-0.38	0.95	0.04	-0.47	-0.28	-7.9	399	0.000

Source: Compilation from primary data

Based on the data shown in table 5, the p-value for Pair 1 is 0.00. The relevant p-value would be 0.0005 (0.001 divided by 2) since it is a one-tailed test. The value is lower than the significance level of 0.05 (known as α). There is insufficient evidence to reject the null hypothesis, which states that there is no significant relationship between the nature of schools and children' academic success. Consequently, the study region's children' academic success is impacted by the public and private schools. In the second set of data, the p-value is 0.001. The relevant p-value would be 0.0005 (0.001 divided by 2) since it is a one-tailed test. The value is lower than the significance level of 0.05 (known as α). Given the lack of data to support the null hypothesis, authors may conclude that the father's engagement in his children's education is not evident in the character of schools. Students' academic performance is therefore affected by the level of parental participation in their education, whether they attend public or private schools. The third pair's p-value is 0.001. The relevant p-value would be 0.0005 (0.001 divided by 2) since it is a one-tailed test. The value is lower than the significance level of 0.05 (known as α). Since there is insufficient data to support the alternative hypothesis, we reject the null hypothesis (that mothers are not involved in their children's education due to the nature of schools). As a result, parental participation in their children's education has an effect on their academic performance in both public and private schools.

7.3 Correlation

In order to establish the relationship between relevant research variables, the correlation approach was used. Academic performance and school type were the proper factors to correlate in this investigation. Researchers employed correlations and hypothesis testing to determine the nature of the relationship between these two variables.

Table 6

Descriptive Statistics			
	Mean	**Std. Deviation**	**N**
Nature of Schools	1.500	.50062	400
Level of Academic Achievement	1.875	.83132	400

Source: Compilation from primary data

Table 7

Correlations			
		Nature of Schools	**Level of Academic Achievement**
Nature of Schools	Pearson Correlation	1	.630
	Sig. (2-tailed)		.000
	N	400	400
Level of Academic Achievement	Pearson Correlation	.630	1
	Sig. (2-tailed)	.000	
	N	400	400

Source: Compilation from primary data

There is a perfect link (r = 1) between school type and academic performance (n = 400), according to the correlations table. According to the 400 full observations, the level of academic accomplishment is substantially correlated with the nature of schools ($p < 0.001$ for two-tiled test) with a Pearson correlation value of 0.630. According to the findings, there is a linear link between the kind of school and the degree of academic accomplishment that is statistically significant ($r = 0.630$, $p < 0.001$). When both variables are trending upwards together, it says that the connection is positive in direction. Hence. This finding contradicts the null hypothesis, which states that student success is unrelated to school type.

8. Policy implications of the study

- **Education Quality Enhancement Policy:** Come up with a plan to make public schools better by building up their infrastructure, educating teachers better, and allocating resources more wisely. periodic evaluations should be a part of this program in order to establish clear criteria for schooling and track progress.
- **Fair Funding Policy:** Create a system of public-school financing that distributes funds fairly. Included in this strategy should be systems for the open and accountable use of duties, with a focus on schools in regions that are under-resourced.
- **Parental Engagement Strategy:** Come up with a method to get parents more involved in their children's schooling on a nationwide level. Included in this plan should be instructions for schools on how to include parents, along with tools and assistance for parents to be an active part of their children's schooling.
- **Creation of Comprehend Aids:** Financial aid, educational resources, and extracurricular opportunities should all be part of a comprehensive program to help kids from low-income households succeed in school. In order to lessen the effect of socioeconomic inequalities on educational achievement, this program should be structured in a certain way.
- **A Plan for Better School Management:** Create a plan to enhance the way government schools are managed. Training for school leaders, procedures for evaluating performance, and assistance in adopting best practices in school administration should all be part of this framework.
- **Establish a reliable mechanism:** Generating of the reliable mechanism for monitoring and evaluating the efficacy of policies and interventions in action. To check whether policies are having the desired effect and to make any required revisions, they should undergo regular evaluations and assessments of

impact. The rules are being put into place with the intention of reducing the gaps between public and private schools, which will lead to more equality and better educational results for every student.

9. Conclusion

While public school kids in Tamil Nadu tend to have lower levels of education than their private school counterparts, this research shows that private schools in general have better facilities, more qualified teachers, and more active parents who help their children succeed academically. Public schools often have difficulties associated with socioeconomic disparities and insufficient funding, despite continuous efforts to enhance education. Better infrastructure, better teacher preparation, more money, and more family involvement are all targeted measures that may help close these inequalities. A more fair and high-quality education for all students may be achieved by merging public and private school systems via a thorough regulatory framework that prioritizes efficient administration and fair allocation of resources.

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