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Evaluating Physical Education Instructional Programs in Delhi Schools

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Abstract: The aim of this study was to assess and compare the effectiveness of Physical Education Instructional Programs in Delhi's private and government schools using a self-developed questionnaire. A total of Sixty Two (62) Physical Education Teachers participated, with Thirty One (31) from private schools and Thirty One (31) from government schools, selected through Stratified Random Sampling to ensure representation from both school types. Descriptive statistics (Mean and Standard Deviation) were used to analyze the data, while an Independent 't' test at a 0.05 significance level was employed for comparison. The results indicated that private schools had a slightly higher mean score (38.87) compared to government schools (37.35), suggesting marginally better performance in private school instructional programs. However, the t-test showed no statistically significant difference between the two groups ($p = 0.275$). These findings imply that while some schools offer well-structured Physical Education programs, challenges such as inadequate teacher training and limited resources may impact the quality of programs in others. Overall, the study concludes that the quality of Physical Education Instructional Programs in both private and government schools in Delhi is similar, with only minor differences. This highlights the need for improvements across all schools to ensure equal opportunities for student success in Physical Education.

Keywords: Physical Education, Instructional Programs, Physical Education Teachers, Delhi Schools.

INTRODUCTION

Physical education (PE) plays a crucial role in the holistic development of students, encompassing their physical, mental, and social well-being. In contemporary educational frameworks, PE is no longer viewed as a peripheral activity but as an integral part of a well-rounded education. The interests of students and the objectives of instructional programs significantly influence learning outcomes in physical education, providing valuable insights for designing curricula that *cater* to diverse student populations (Chen & Ennis, 2004). Well-structured PE programs are essential for instilling lifelong healthy habits, enhancing motor skills, and promoting social interaction, all of which are key to student development. This is especially critical in urban environments like Delhi, where sedentary lifestyles and limited access to recreational spaces present challenges to maintaining physical activity levels (Gupta & Kumar, 2020). This research aims to assess the effectiveness of physical education instructional programs in Delhi's schools, identifying their strengths, challenges, and areas for improvement.

Importance of Physical Education in Schools

Globally, physical education is recognized as a fundamental component of school curricula. The World Health Organization (WHO) recommends that children and adolescents aged 5–17 engage in at least 60 minutes of moderate to vigorous physical activity daily (WHO, 2020). Schools serve as primary environments where children can meet these guidelines through structured PE programs. Research has shown that physical education not only improves physical health but also enhances academic performance, cognitive development, and emotional well-being (Singh *et al.*, 2019). In densely populated cities like Delhi, schools have a unique opportunity to bridge the gap between sedentary lifestyles and the need for regular physical activity. Armstrong & Welsman (2019) emphasize the importance of regular physical activity in children and adolescents, highlighting its positive effects on both physical health and psychosocial development.

Current Landscape of Physical Education in Delhi

Delhi, India's capital, is a city with diverse socio-economic and cultural dynamics. Although it has a well-established educational infrastructure, the status of physical education programs in schools is inconsistent. Public and private schools in Delhi often differ significantly in terms of resources, facilities, and the quality of PE instruction. A report by the Delhi Commission for Protection of Child Rights (DCPCR, 2022) revealed that many schools lack dedicated spaces for physical education and have insufficient qualified PE teachers, which impedes effective program implementation. Additionally, the urban pressures of limited space and academic competition often result in the marginalization of PE in school curricula.

Role of Physical Education Teachers

The success of physical education programs heavily depends on the competence and dedication of PE teachers. These educators are responsible for developing curriculum-aligned activities, engaging

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students, and fostering an inclusive and supportive environment. In Delhi, however, the recruitment and professional development of PE teachers face substantial challenges. Sharma and Verma (2021) highlight that many Physical Education Teachers in Delhi lack specialized training and access to modern teaching resources. This research aims to explore the role of Physical Education Teachers in delivering effective instructional programs and to identify gaps that hinder their ability to provide high-quality instruction.

Challenges in Implementing Physical Education Programs

Implementing effective Physical Education programs in Delhi schools is fraught with challenges. Hardman & Green (2020) provide a global overview of Physical Education practices, emphasizing disparities in implementation and resource distribution. In Delhi, common obstacles include inadequate infrastructure, limited funding, and a lack of awareness about the importance of physical education among stakeholders. The pressure to prioritize academic excellence further marginalizes Physical Education in school schedules. A study by Kumar and Mehta (2023) found that nearly 40% of schools in Delhi allocate less than two hours per week to physical education, which falls significantly short of the recommended standards. This imbalance underscores the need for a comprehensive evaluation of existing PE programs to identify barriers and propose improvements.

METHODOLOGY SELECTION OF SUBJECTS

For this study, Sixty Two (62) Physical Education Teachers from Delhi participated, with equal representation from both private and government schools, comprising Thirty One (31) Physical Education Teachers from each category. Stratified random sampling was utilized to ensure balanced representation from both school types.

Selection of Variables

For this study, the researcher used a self-developed questionnaire to assess the effectiveness of instructional programs in both private and government schools in Delhi.

Statistical Technique Used

Descriptive statistics (mean and standard deviation) were used to characterize the data. An independent t-test, with a significance level of 0.05, was conducted to compare the effectiveness of instructional programs between private and government schools in Delhi.

RESULTS

The study analyzed data from Sixty Two (62) Physical Education Teachers in Delhi, with Thirty One (31) Physical Education Teachers from private schools (N=31) and Thirty One (31) teachers from government schools (N=31), to assess the effectiveness of Physical Education instructional programs in Delhi schools. The table below presents the descriptive statistics and results of the independent t-test:

Table 1: Descriptive Statistics and Independent t-Test for Instructional Programs in Private and Government Schools

Variable	School	N	Mean	S.D.	Std. Error Mean	Mean Difference	t	Sig. (2-tailed)
Instructional Program	**Private**	31	38.87	5.15	0.92	1.52	1.10	0.28
	Government	31	37.35	5.68	1.02		1.10	0.28

Statistical Interpretation

Table 1 presents a comparison of the Physical Education Instructional Programs between private and government schools. The mean score for private schools (38.87) was slightly higher than that for government schools (37.35), with standard deviations of 5.15 and 5.68, respectively. Although private schools scored higher on average, the independent t-test revealed a p-value of 0.28, which is greater than the standard significance level of 0.05. This suggests that the difference between the instructional programs in private and government schools is not statistically significant and may be due to chance.

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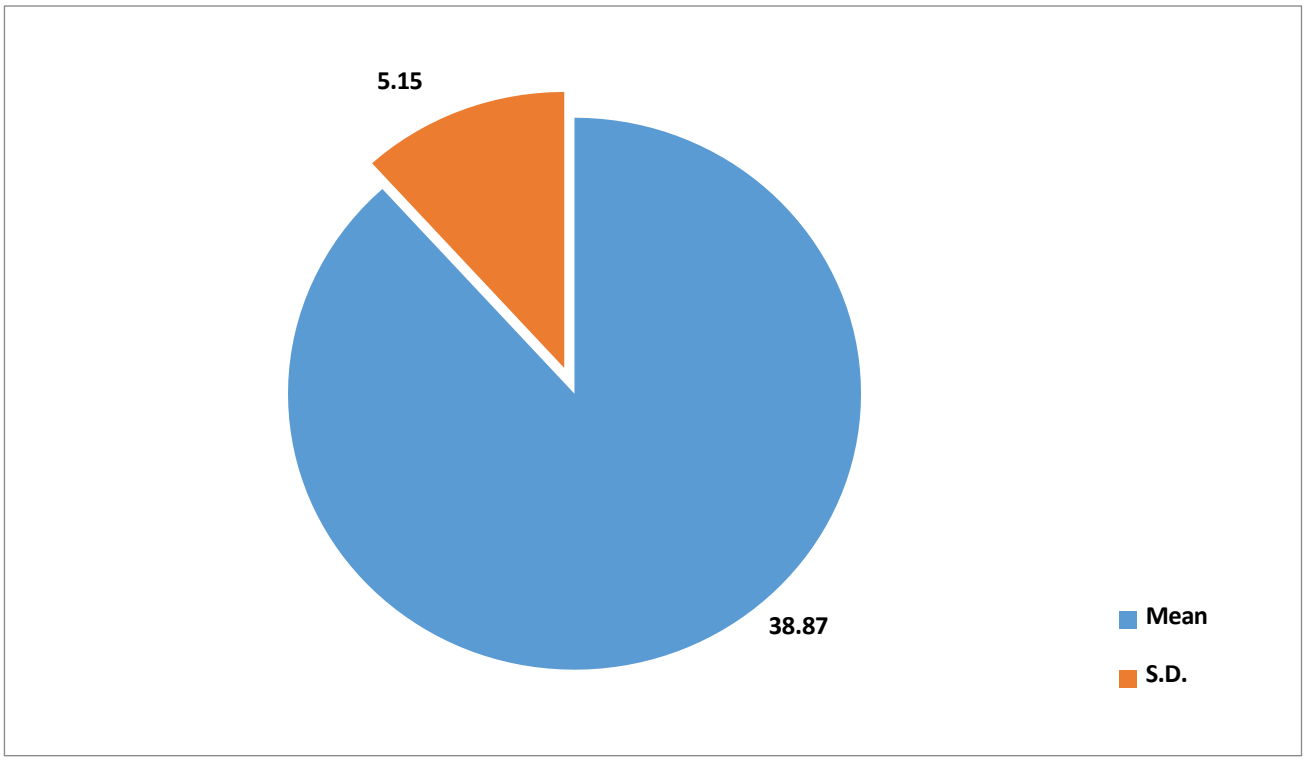

Fig. 1.1: Pie Chart Representation- Mean and S.D. of Private Schools

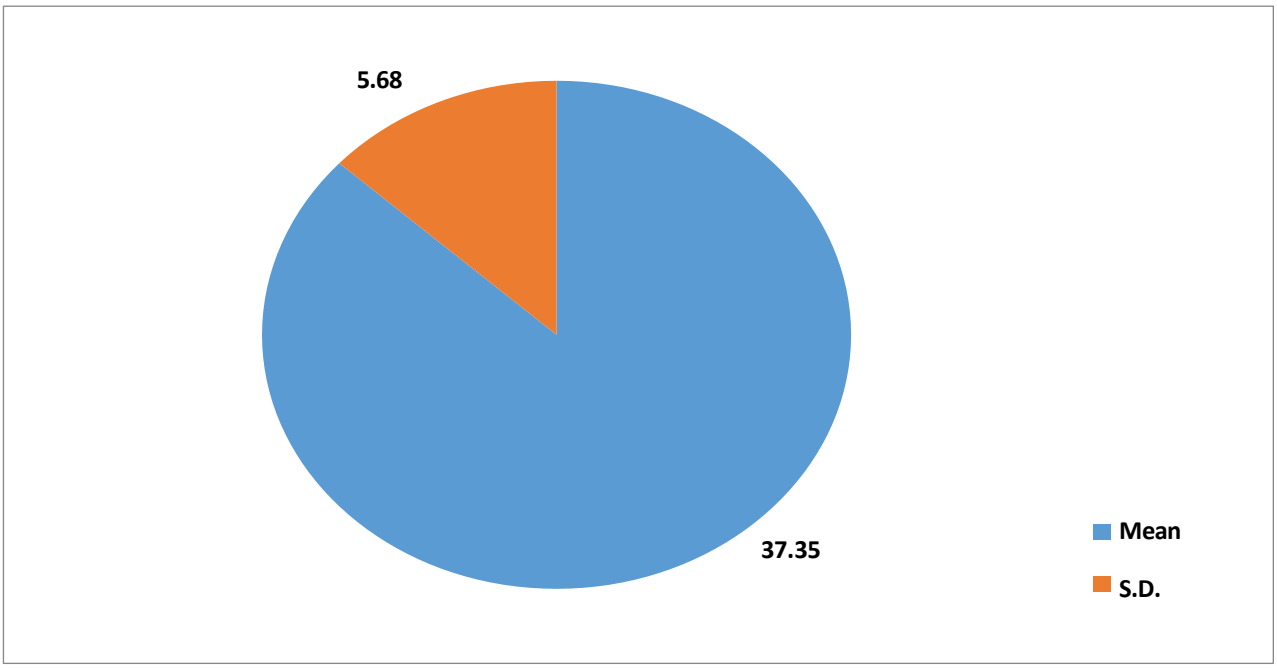

Fig. 1.2: Pie Chart Representation- Mean and S.D. of Government Schools

DISCUSSION OF FINDINGS

The present study aimed to assess and compare the quality of Physical Education instructional programs in private and government schools in Delhi, using data collected from Sixty Two (62) Physical Education Teachers—Thirty One (31) from private schools and Thirty One (31) from government schools. The data were analyzed using descriptive statistics and an independent t-test.

The results revealed that private schools had a slightly higher mean score (38.87) compared to government schools (37.35). This suggests that private schools, on average, may provide slightly more effective instructional programs in Physical Education. However, the mean difference of 1.52 is relatively small, indicating only a marginal variation in the quality of the instructional programs between the two types of schools.

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The findings are consistent with previous research suggesting that private schools often have better access to resources, funding, and infrastructure, which may contribute to slightly higher-quality educational programs (Gupta & Kumar, 2020). In contrast, government schools are often challenged by resource constraints and limited infrastructure, which can affect the delivery and quality of Physical Education (DCPCR, 2022).

Despite the slight difference in mean scores, the t-test revealed no statistically significant difference between the two groups ($p = 0.28$), suggesting that the observed difference in program quality may be due to chance. This finding aligns with the work of Sharma and Verma (2021), who noted that despite the resource disparities between private and government schools, the quality of teaching in Physical Education programs can remain comparable when factors such as teacher commitment and curriculum alignment are accounted for.

Overall, these findings indicate that while private schools may have a slight edge in instructional program quality, the difference is not significant enough to warrant the conclusion that private schools consistently outperform government schools in this regard. Therefore, it is crucial for policymakers and educational administrators to focus on improving Physical Education programs across both school types to ensure that all students have access to high-quality physical education, regardless of the school they attend.

CONCLUSIONS

The conclusion drawn from the obtained results indicates that there is no statistically significant difference in the quality of Physical Education instructional programs between private and government schools, as evidenced by the p-value of 0.28. This suggests that any observed differences are likely due to chance rather than representing a true effect. The findings imply that both private and government schools provide similar levels of instruction in Physical Education. As such, efforts to improve the quality of these programs should focus on systemic factors, such as enhancing teacher training, infrastructure, and resources, rather than attempting to differentiate between private and government schools. Additionally, future studies could explore other factors influencing instructional quality, such as curriculum design or external resources, to gain a deeper understanding of how to improve Physical Education programs across both school types.

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