

A Study to Assess the Effectiveness of Information Guide Sheet On Knowledge About Benefits and Outcome of Physical Education for School Children

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Abstract: *The present study aimed to evaluate the effectiveness of an information guide sheet on enhancing school teachers' knowledge regarding the benefits and outcomes of physical education for children. With physical education (PE) being an essential part of a child's overall development, the study emphasizes the need to address teachers' gaps in knowledge concerning its impact on children's physical health, cognitive functions, and social skills. Teachers often play a crucial role in shaping children's attitudes and engagement in physical activities, yet research indicates insufficient teacher awareness in many regions. This study was conducted in selected schools in Bidar, Karnataka, where a sample of school teachers participated. A pre-test/post-test methodology was employed to assess teachers' knowledge before and after their exposure to the information guide sheet. The findings revealed a statistically significant improvement in teachers' knowledge post-intervention, indicating the efficacy of the information guide sheet as a tool for enhancing educators' understanding of physical education. These findings advocate for the integration of such resources into professional development programs for teachers, particularly in areas where physical education awareness is limited.*

Keywords: physical education, teacher knowledge, school children, information guide sheet, educational intervention

1. Introduction

Physical education (PE) plays a pivotal role in the comprehensive development of children. It not only promotes physical health but also contributes to cognitive, emotional, and social well-being. According to the World Health Organization (WHO), physical activity is fundamental for healthy growth, development, and the prevention of chronic diseases later in life (WHO, 2018). However, despite the documented benefits, the implementation of PE programs often lacks consistency, especially in schools where teachers may have limited understanding of the profound impact of physical education on overall student development.

Research suggests that one of the critical barriers to effective physical education programs is the insufficient knowledge among educators regarding the benefits and outcomes of such programs (Bailey et al., 2009; Pate et al., 2013). In many instances, teachers' lack of awareness prevents them from fully incorporating physical activities that are essential for children's development. Additionally, there is often limited professional training that focuses on the pedagogical importance of physical education, further contributing to the gap.

This study aims to assess the effectiveness of an information guide sheet designed to enhance school teachers' knowledge about physical education. The guide sheet was crafted to provide teachers with clear, concise, and scientifically backed information on the significance of physical education, with the goal of promoting its integration into the school curriculum. By using a pre-test and post-test approach, this research evaluates the impact of the guide sheet on teachers' knowledge and, ultimately, their teaching practices.

2. Literature Review

The Importance of Physical Education

Physical education is recognized globally for its role in fostering both physical and mental well-being. The integration of regular physical activity into daily routines has been shown to improve cardiovascular health, reduce the risk of obesity, and enhance muscle and bone development in children (Janssen & leblanc, 2010). Furthermore, research by Strong et al. (2005) highlights the association between physical activity and cognitive development, noting that physical education positively affects children's concentration, memory, and learning abilities.

More recently, studies have also highlighted the mental health benefits of physical education. According to Durlak et al. (2011), physical activity contributes to reduced anxiety, depression, and stress in children, promoting better emotional regulation and social interaction. Given these multifaceted benefits, it is crucial that teachers possess a deep understanding of physical education's role in children's lives.

Teachers' Knowledge and Physical Education

Despite the clear advantages of physical education, there remains a significant gap in teachers' knowledge regarding its full potential. Studies indicate that while teachers are often tasked with delivering physical education programs, their understanding of its benefits is often limited (Jones et al., 2018; Morgan & Hansen, 2008). In a study by Smith (2015), it was found that teachers with insufficient training in physical education were less likely to implement effective teaching strategies, leading to suboptimal student outcomes. The need for teacher education in physical education is particularly relevant in regions where there is little emphasis on professional development related to PE. Teachers who are not adequately trained may fail to understand the pedagogical frameworks that make physical education more effective. According to a review by Triggs (2016), professional development programs that incorporate up-to-date knowledge about the benefits of physical education can significantly improve teachers' attitudes and efficacy in teaching the subject.

Educational Tools for Enhancing Knowledge

Several studies have shown the effectiveness of educational tools such as guide sheets, instructional manuals, and online resources in improving teachers' understanding of various subjects (Kumar et al., 2015). In the context of physical education, educational tools can serve as valuable resources to enhance teachers' knowledge and support their teaching practices. A study by O'Donnell et al. (2014) found that when teachers were provided with clear, concise materials about physical education, they were more likely to integrate physical activities into their teaching routines, resulting in better student participation and outcomes.

3. Objectives and Methodology

3.1 Objectives

- 1) **Primary Objective:** To assess the effectiveness of an information guide sheet in improving school teachers' knowledge about the benefits and outcomes of physical education for school children.
- 2) **Secondary Objective:** To evaluate whether demographic factors such as teachers' age, teaching experience, and educational background influence the extent of knowledge improvement after using the guide sheet.

3.2 Methodology

This study employed a quantitative research design using a pre-test and post-test methodology. The sample for this study consisted of 100 school teachers from selected schools in Bidar, Karnataka. The inclusion criteria were that teachers should be involved in teaching children between the ages of 6 and 14 years, and they should not have received formal training in physical education.

The data collection tool was a structured questionnaire developed to assess teachers' knowledge of physical education. The questionnaire included questions about the physiological, psychological, and academic benefits of physical activity, as well as knowledge of physical education methodologies.

The intervention in this study involved the distribution of an information guide sheet to the teachers. The guide sheet provided essential information on the benefits of physical education, with sections dedicated to its impact on physical health, academic performance, and social development. Teachers were given two weeks to read the guide sheet before the post-test was administered.

The data collected from the pre-test and post-test were analyzed using descriptive and inferential statistics. The paired t-test was used to determine whether there was a statistically significant difference between the pre-test and post-test scores. A p-value of less than 0.05 was considered statistically significant.

4. Results

The analysis of the pre-test and post-test data revealed a significant improvement in teachers' knowledge after exposure to the information guide sheet. The mean pre-test

score was 42%, indicating that the teachers had limited knowledge about the benefits and outcomes of physical education before the intervention. After reading the guide sheet, the mean post-test score increased to 80%, demonstrating a substantial improvement.

The statistical analysis confirmed that the difference in scores between the pre-test and post-test was statistically significant ($p < 0.01$), suggesting that the information guide sheet had a positive effect on teachers' knowledge.

5. Discussion

The significant improvement in teachers' knowledge supports the effectiveness of the information guide sheet as an educational tool. These findings align with the work of Smith et al. (2016), who found that educational tools designed to simplify complex concepts could significantly enhance teachers' understanding of subjects they were less familiar with.

Moreover, demographic variables such as age and years of teaching experience were found to have no significant impact on knowledge improvement. This suggests that the effectiveness of the guide sheet was not influenced by these factors, making it a universally applicable tool for teachers across different experience levels.

The findings also corroborate studies by Jones et al. (2018), which indicated that when teachers are provided with structured and easy-to-understand materials, they are more likely to incorporate the concepts into their teaching practices.

6. Conclusion

This study concluded that the use of an information guide sheet significantly improved school teachers' knowledge about the benefits and outcomes of physical education for children. The substantial increase in knowledge following the intervention emphasizes the value of such educational resources in enhancing teacher competence in physical education. As physical education plays a crucial role in the overall development of children, integrating such resources into teacher training programs can help improve the quality of physical education across schools. Future research should explore the long-term impact of such interventions and investigate how teachers apply their improved knowledge in classroom settings.

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