

Green Practices Among Prospective Teachers at Secondary Level: A Comparison Based on Educational Qualification

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Abstract- In today's world, protecting and conserving the environment is essential to prevent a wide range of related problems. Green Practices among Prospective Teachers play a crucial role in fostering environmental awareness and sustainability in educational settings. Teachers are powerful influencers; their actions and attitudes can deeply impact student's behaviours and values. The Prospective Teachers at the Secondary level engage in Green Practices such as energy conservation, waste reduction, and eco-friendly transportation they set an example of environmental responsibility, which can inspire students to adopt similar habits. The level of Educational Qualification among Prospective Teachers often correlates with their awareness, education, and motivation toward sustainability issues. Investigating the Green Practices of Prospective Secondary-Level Teachers, who play a crucial role in educating future generations, holds substantial significance for addressing environmental challenges. This research study attempted to compare the Green Practices of Prospective Teachers at Secondary Level Based on their Educational Qualifications in the current context. The research was conducted by using Descriptive Survey method. As a result, 208 Secondary Level Prospective Teachers in Ernakulam and Thrissur District in Kerala were selected as a sample for the current research. Self-constructed Rating Scale by the investigator is used as the Tool for the study. Using statistical approaches, data is gathered analysed, and interpreted. The findings of the study suggest that a significant proportion of Prospective Teachers at the Secondary Level had an average level of comprehension regarding Green Practices. The results also revealed that, there is a significant difference in Green Practices of Prospective Teachers based on their Educational Qualification. So, the Teacher Education Programme should develop a comprehensive framework for the design and implementation of Environmental Education associated with Sustainable Practices in to the Curriculum.

Index Terms- Educational Qualifications, Green Practices, Prospective Teachers, Secondary Level.

I. INTRODUCTION

The integration of Green Practices into education is increasingly recognized as essential for fostering environmentally responsible behaviour in future generations. Educators, particularly those at the secondary level, play a pivotal role in shaping student's awareness and attitudes toward environmental sustainability. Prospective Teachers those preparing to enter the profession represent a unique group within this domain, as their Educational Qualification and commitment to sustainable practices can significantly impact their future students. The Teachers those who are possess environmental literacy, more likely to integrate Green Practices in their personal and professional lives, showing a stronger commitment to environmental protection. This literacy often extends to teaching methods, as such teachers may incorporate environmental themes across subjects, encouraging students to understand and participate in sustainable actions. Understanding these Prospective Teacher's Green Practices, defined as behaviours that support environmental sustainability in daily life, is critical for developing targeted interventions to strengthen eco-friendly attitudes and behaviours in educational settings (Orr, 2004; Tilbury, 1995).

Research indicates that the adoption of Green Practices among educators is often shaped by their personal involvement with environmental issues, which includes both awareness of ecological challenges and active participation in sustainable behaviours (Ajzen, 1991). Studies have shown that individuals who are Environmentally Engaged are

more inclined to embrace and advocate for sustainable practices such as waste reduction, energy conservation, and responsible resource usage in both personal and professional spheres (**Kollmuss & Agyeman, 2002; Hungerford & Volk, 1990**). While numerous studies have explored the integration of sustainability in education, there remains a notable lack of comparative research specifically examining how Prospective Teacher's Educational Qualifications influence their adoption of Green Practices.

The study aims to address the gap by comparing the Green Practices of Prospective Teachers at the Secondary Level according to their Educational Qualifications. By doing so, it seeks to provide insights into the motivations behind eco-friendly behaviours and contribute to the development of environmentally conscious educators. The findings from this research are anticipated to lay the foundation for promoting Green Practices within teacher training programs, ultimately fostering a culture of sustainability in educational settings.

II. NEED AND SIGNIFICANCE

As environmental challenges intensify globally, the education sector is tasked with cultivating environmentally literate and responsible individuals who are capable of addressing complex sustainability issues (**Tilbury, 1995**). Teachers play a critical role in this process, as they are often the primary sources of environmental knowledge and attitudes for young people. Prospective Teachers, who are in the early stages of their professional development, represent an ideal group for studying the integration of Green Practices actions that promote environmental sustainability because their attitudes and behaviours are still forming and thus open to influence. Investigating Green Practices among Prospective Teachers at the Secondary Level, and examining how these practices vary according to their Educational Qualifications, can provide valuable insights into preparing educators who will promote sustainability effectively.

Prospective Teachers are uniquely positioned to influence their student's attitudes and behaviours towards sustainability. Research indicates that educators who are personally committed to environmental sustainability are more likely to inspire similar values in their students, thus amplifying the impact of environmental education. Despite the

recognized importance of this issue, there is a significant gap of comparative studies focusing on Prospective Teacher's Green Practices relate to their Educational Qualifications. Understanding these dynamics is crucial for identifying effective strategies to enhance Teacher Training programs and promote sustainable practices within educational settings. By exploring the relationship between Educational Qualifications and Green Practices among Prospective Teachers, this research aims to provide valuable insights that can inform curriculum development and policy-making in education (**Sterling, 2001**). Ultimately, this study seeks to contribute to a broader understanding of how educational institutions can better prepare future educators to instil a culture of sustainability in their classrooms, thereby fostering a generation equipped to tackle environmental challenges effectively.

III. HYPOTHESES OF THE STUDY

The investigator formulated the following hypotheses for the present study.

1. There is a significant difference in the levels of Green Practices among Prospective Teachers at Secondary Level.
2. There is a significant difference in Green Practices among Prospective Teachers at Secondary Level based on their Educational Qualifications.

IV. OBJECTIVES OF THE STUDY

The researcher established the subsequent objectives for the current investigation.

1. To find out the levels of Green Practices among Prospective Teachers at Secondary Level.
2. To compare the extent of Green Practices among Prospective Teachers at Secondary Level based on their Educational Qualifications.

V. METHODOLOGY

Descriptive Survey method was used for the present study. This method was concerned with surveying and describing the Green Practices of Prospective Teachers at Secondary Level based on their Educational Qualifications. The sample of the study consisted of 208 B.Ed. Student Teachers from Ernakulam and Thrissur districts of Kerala. Stratified Random Sampling Technique was adopted to select the sample from the population. Data were collected

through a self-constructed Rating Scale by the investigator. The statistical techniques used for analysis of data include computation of Percentage analysis and significant difference between means (t-test).

VI. ANALYSIS AND INTERPRETATION

The data collected were tabulated and statistically analysed. The entire group was classified into high, average, and low-level groups based on their score for Green Practices. The subjects with a score above or equal to the value of Mean + σ were taken as high and those with a score below or equal to the value of Mean - σ were taken as low. The score obtained in between these were considered as average. Significance of difference between two means (t-test) is used to compare the Green Practices among Student Teachers at Secondary level in relation to Educational Qualifications. The details of the results are given in the following tables.

Table I: Level of Green Practices among Prospective Teachers at Secondary Level

Green Practices	Number	Mean	SD	Level in %		
				High	Average	Low
Secondary Level Student Teachers	208	146.29	20.16	14	65	21

The **Table I.** shows that Mean value of Green Practices among Prospective Teachers at Secondary level is 146.29 and standard deviation is 20.16. The table also reveals that 14% of the total sample shows high Green Practices, whereas 65% shows average and 21% shows low Green Practices. That means the number of Student Teachers who possessed average level of Green Practices higher than high and low groups.

The result revealed that the number of Prospective Teachers at Secondary Level shows average level of Green Practices. It focuses on the need for including effective strategic plans for developing Green

Practices among Prospective Teachers at secondary level in the curriculum.

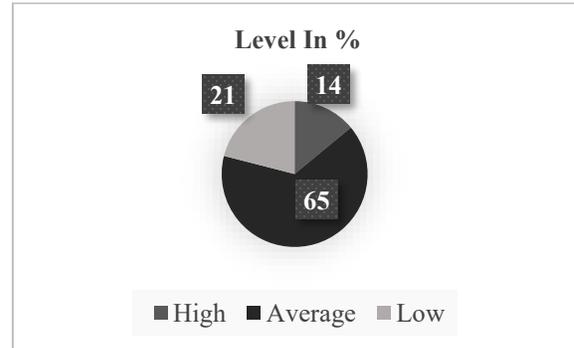


Fig. 1: Graphical representation of the levels of Green Practices among Prospective Teachers at Secondary Level.

Table II Comparison of Green Practices among Prospective Teachers at Secondary Level based on their Educational Qualification

Green Practices	Number	Mean	SD	t-Value	Significance
Post Graduates (PG)	122	151.17	19.00	4.32	P<0.01
Under Graduates (UG)	86	139.38	19.69		

Table. II illustrate that Mean and Standard Deviation of Green Practices among Post Graduates Prospective Teachers at Secondary level are 151.17 and 19.00 and for Under Graduates are 139.38 and 19.69 respectively. The t- value obtained is 4.32. This value is greater than set value at 0.01 level of significance. That means there is a significant difference in Green Practices among Prospective Teachers at Secondary level based on their Educational Qualifications.

Hence the hypothesis that “There is a significant difference in Green Practices among Prospective Teachers at Secondary Level based on their Educational Qualification” is accepted.

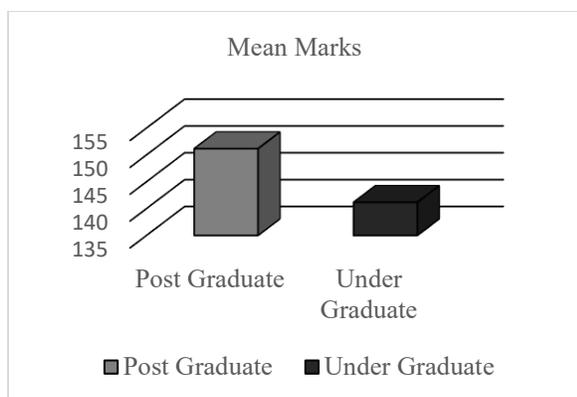


Fig. 2. Graphical representation of Comparison of Green Practices among Prospective Teachers at Secondary Level based on their Educational Qualification.

VII. FINDINGS AND DISCUSSION

The findings of the study indicates that the majority of Prospective Secondary-level Teachers exhibit average level of Green Practices. Furthermore, the results demonstrate a significant variation in Green Practices among Prospective Teachers based on their Educational Qualification. This highlights the urgent need for comprehensive programs aimed at fostering Green Practices among secondary-level Prospective Teachers. The research underscores the critical importance of cultivating a sense of responsibility, along with a scientific and positive attitude towards the environment, among student teachers. It emphasizes that teacher educators play a pivotal role in this endeavour, with education serving as a powerful tool to achieve this objective.

VIII. EDUCATIONAL IMPLICATIONS

The educational implications of this study are,

- Integration of Environmental Education in Teacher Training Programmes.
- Promoting Environmental Activities.
- Development of Green Competencies in Curriculum.
- Capacity Building for Teacher Educators.
- Inculcation of Lifelong Environmental Responsibility

IX. CONCLUSION

The rapid growth of population and urbanization has profoundly transformed societal lifestyles. The surge in developmental activities has led to a marked decline

in environmental quality, the loss of various biodiversity species, and the degradation of pristine habitats. These changes pose severe challenges to the survival and sustainability of the human population in the future. Additionally, the combustion of fossil fuels releases significant amounts of carbon dioxide into the atmosphere, exacerbating the problem of global warming. The primary challenge in addressing environmental degradation lies not only in the lack of scientific knowledge but also in the commitment to take decisive action. The study emphasizes the significant need to understand and enhance Green Practices among Prospective Secondary-level Teachers, given their vital role in cultivating environmentally responsible future generations. The findings indicate that a majority of Prospective Teachers demonstrate average level of Green Practices, raising critical concerns regarding their readiness to promote environmental awareness and sustainability in their professional teaching contexts. Moreover, the study identifies substantial differences in the adoption of Green Practices based on the Educational Qualification, with individuals exhibiting higher Educational Qualification displaying a greater propensity toward sustainable behaviours. Environmental education plays a pivotal role in sensitizing individuals to the responsible use of natural resources and the dangers posed by environmental pollution. Prospective Teachers, recognized as agents of social transformation, hold particular importance in this effort, as emphasized by the Kothari Commission (1964–66).

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