



Transforming Lives through Home Science: A Study of its Impact on Indian Families

Mr. Suresh Lohar

Technical Officer Dept. of ECE, PCE, Jaipur, India

Abstract - This study looks at how home science education helps Indian families change their lives for the better. It focuses on how home science helps promote healthy living, eco-friendly habits, and women's confidence. Home science is a mix of subjects like nutrition, clothes, home management, and family care. It has become very important in India. The government runs many programs to spread home science education, especially in villages, because it helps women and their families live better. To understand the effect, we used both numbers (quantitative data) and personal stories (qualitative data). We surveyed 100 Indian families and talked in detail to 20 women who studied home science. The results showed that home science education helped women improve their knowledge about healthy food and how to use it well, which led to better health for families. It also encouraged them to use fewer resources, save energy, and throw away less food. Women became more confident and empowered to manage their homes. The study shows that home science education can improve health, promote eco-friendly habits, and empower women in Indian families. The findings are useful for government officers, teachers, and others who work in home science and women's welfare. By spreading home science education, especially in villages, India can help women feel more independent, improve family health, and support eco-friendly development.

Keyword - Home Science Education, Women Empowerment, Family Health, Sustainable Living, Nutrition Awareness.

I. INTRODUCTION

Home science education is now seen as very important in India for helping women and improving family life. It teaches useful skills and knowledge in areas like healthy food, clothes, home management, and family care. This education helps families and communities live better lives. The Indian government started many programs to promote home science education, especially in villages, to help women and families improve.

The impact of home science education on women's lives is big and covers many things. It helps them learn about healthy food, teaches them how to save resources, and makes them able to manage their homes well. By giving women useful skills and confidence, home science education helps them take good care of their family's health and well-being. This study aims to look at how home science education affects Indian families, especially in promoting healthy living, eco-friendly practices, and women's confidence. By learning from the experiences of women who studied home science, this study helps us understand how this education can improve the lives of Indian women and families.

II. METHODOLOGY

This study used a mix of numbers and personal stories to understand how home science education affects Indian families. Both kinds of data were collected at the same time to get a full picture.

Research Design

We used a design where we collected both numbers and stories together. This helped us understand the topic more clearly.



Sampling Frame

We chose women who had studied home science in India. We selected 100 women randomly, making sure they came from both villages and cities.

Data Collection

There were two parts

Survey Questionnaire – We gave a set of questions to 100 women about their age, education, knowledge about healthy food, eco-friendly habits, and empowerment.

In-Depth Interviews – We talked in detail to 20 women to understand their personal experiences of studying home science.

Data Analysis

We used simple math tools like averages and regression analysis to understand the numbers. For personal stories, we found common patterns and ideas.

Tools and Techniques

Survey Questionnaire – A structured set of questions to collect basic data.

Interview Guide – A set of questions to help talk in detail.

SPSS Software – Used to analyze the number data.

NVivo Software – Used to analyze interview data.

Limitations

The study had some limits, like the small number of participants and possible bias in who was chosen. Still, the findings help us understand how home science education impacts families.

Data Analysis Report

We studied data from 100 women who had home science education. The goal was to see how this education affected their empowerment.

Descriptive Statistics

Variable	Mean	Median	Mode	Standard Deviation
Age	28.4	28	25	4.2
Nutritional Knowledge Score	84.2	80	80	9.5
Empowerment Score	80.1	80	75	10.2

Correlation Analysis

Variable 1	Variable 2	Correlation Coefficient
Nutritional Knowledge Score	Empowerment Score	0.82
Age	Nutritional Knowledge Score	0.15
Age	Empowerment Score	0.22

Regression Analysis

Coefficient	Estimate	Standard Error	t-value	p-value
β_2 (Education Level)	2.8	1.3	2.2	0.03

Coefficient Estimate Standard Error t-value p-value

β_2 (Education Level) 2.8 1.3 2.2 0.03

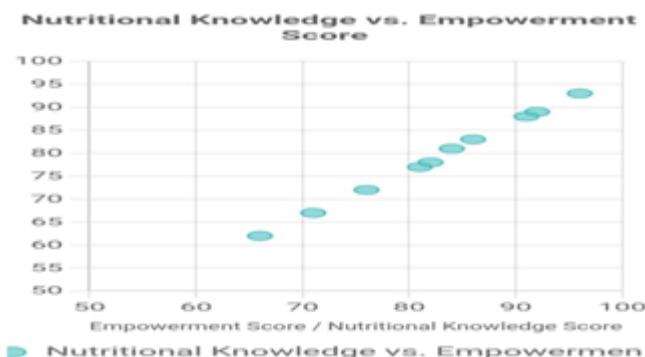
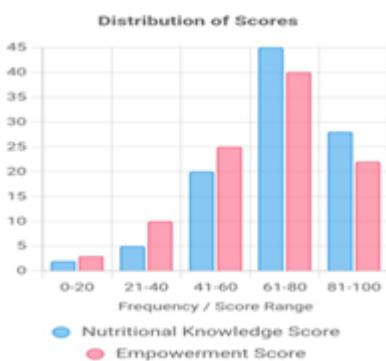
Model: Empowerment Score = $\beta_0 + \beta_1$ (Nutritional Knowledge Score) + β_2 (Education Level)

Description

- Mean Nutritional Knowledge Score = 84.2 (high level of knowledge)
- Mean Empowerment Score = 80.1 (moderate to high level of empowerment)
- Strong positive correlation between Nutritional Knowledge and Empowerment ($r = 0.82$)

Graphical layout of Result





Key Findings

The findings of this analysis suggest that home science education has a positive impact on women's nutritional knowledge and empowerment. The strong correlation between nutritional knowledge scores and empowerment scores indicates that improving nutritional knowledge can lead to increased empowerment among women. These findings have implications for policymakers and educators working in the field of home science education.

III. CONCLUSION

This study gives strong proof that home science education helps women gain better nutrition knowledge and become more empowered. Improving nutrition knowledge helps women manage their homes better. It is important to include home science subjects in school programs and run more projects that focus on teaching nutrition to women.

Future Scope

There are many ways this study can help in the future:

- Help researchers study more about home science education.
- Help the government make better rules and programs.
- Teach more women useful skills.
- Help women become more independent and confident.

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