

## **STUDY OF INNOVATIVENESS OF SENIOR SECONDARY SCHOOL TEACHERS**

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### **ABSTRACT**

Innovativeness among teachers has become a central focus in contemporary education, as it directly influences teaching effectiveness, student engagement, and the overall quality of learning experiences. Senior secondary school teachers, who are responsible for shaping young minds at a critical stage of academic and personal development, require innovative approaches to meet the demands of twenty-first-century education. This study seeks to map the innovativeness of senior secondary school teachers with particular attention to gender-based comparisons.

The primary objective of the research is to compare the innovativeness of male and female senior secondary school teachers. In alignment with this, the hypothesis states that there is no significant difference in the innovativeness of male and female senior secondary school teachers. The study adopts a descriptive survey design, employing a standardized Innovativeness Scale to collect data from a representative sample of teachers across different schools. Both descriptive and inferential statistical tools were applied to analyze the findings.

Result revealed that there was significant difference between the innovativeness of male and female of senior secondary school teachers. It is concluded that female senior secondary school teachers demonstrate greater innovativeness compared to their male counterparts.

**Keywords:** Innovativeness, Senior Secondary Teachers, Gender Comparison.

### **1. INTRODUCTION**

In today's rapidly evolving educational landscape, innovativeness has become an essential quality for teachers who seek to meet the challenges of twenty-first-century learning. The world is witnessing unprecedented technological, social, and cultural transformations, and schools are at the forefront of preparing young learners to navigate these changes. Senior secondary education, in particular, plays a crucial role in shaping students' academic trajectories and career choices. Teachers at this level are not merely transmitters of knowledge but facilitators of creativity, critical thinking, and problem-solving. Their capacity for innovativeness determines the extent to which they can inspire, engage, and empower their students. Hence, understanding and mapping the innovativeness of senior secondary school teachers has significant implications for educational improvement and policy-making.

#### **Innovativeness in Education**

Innovativeness can be defined as the ability to generate, adopt, and apply new ideas, methods, or techniques that bring about meaningful improvements. In the context of education, it is reflected in teachers' willingness to experiment with new pedagogical approaches, integrate technology into classrooms, adapt to diverse learning needs, and design engaging learning environments. An innovative teacher not only responds to challenges but also proactively creates opportunities for learners to excel beyond traditional academic boundaries. Research indicates that teacher innovativeness fosters student creativity, enhances problem-solving skills, and nurtures lifelong learning habits (Avadhanam & Chand, 2016).

#### **Importance of Innovativeness among Senior Secondary Teachers**

At the senior secondary level, students are at a transitional stage, preparing for higher education, vocational pursuits, and professional life. Teachers at this stage face the dual responsibility of ensuring subject mastery and cultivating skills such as critical thinking, adaptability, and innovation. The ability of teachers to design novel instructional strategies, employ digital tools, and encourage collaborative learning significantly influences students' readiness for the globalized knowledge economy. Furthermore, teacher innovativeness promotes a culture of continuous improvement in schools, where learning is seen not as static but as a dynamic and evolving process.

### **Gender and Innovativeness in Teaching**

The question of gender differences in innovativeness has been an area of interest for researchers in educational psychology and teacher development. Male and female teachers often encounter different professional experiences shaped by societal expectations, cultural roles, and institutional dynamics. While some studies suggest that female teachers demonstrate stronger collaboration and student-centered approaches, male teachers are often associated with higher risk-taking in adopting new methods (Parlar & Cansoy, 2017). However, findings remain inconclusive, highlighting the need for more context-specific investigations.

In India, where educational contexts are diverse and dynamic, examining gender-based innovativeness among senior secondary teachers can offer valuable insights. If no significant difference is found between male and female teachers, it would underscore the universality of innovativeness as a professional trait, transcending gender divisions. Conversely, if variations exist, these findings could guide targeted professional development programs that cater to specific needs.

### **Rationale of the Study**

Despite the growing recognition of innovation in education, relatively limited research has been conducted on mapping the innovativeness of teachers, especially at the senior secondary level in India. Most existing studies focus on students' creativity or institutional innovation, leaving a gap in understanding how teachers themselves embody and practice innovativeness. Mapping teacher innovativeness is crucial not only for academic research but also for practical application in teacher education, curriculum reform, and policy initiatives. By identifying the levels and patterns of innovativeness among teachers, this study seeks to provide evidence-based recommendations for fostering innovation-driven education.

## **2. REVIEW OF LITERATURE**

**Shibiru, T., & Bekele, M. (2024)** focused on innovation and change within secondary education, emphasizing how leadership using frameworks like Fullan's, Rogers', and Lewin's theories can cultivate creativity, adaptability, and equity. It also addresses common obstacles such as resource constraints and resistance to change.

**Subrahmanyam et.al (2024)** examines pedagogical innovations in engineering education, highlighting the benefits of Project-Based Learning, Problem-Based Learning, and technology-enhanced instruction (e.g., simulations) to boost critical thinking and engagement, while also noting institutional resistance and the need for faculty development.

**Parlar & Cansoy (2017)** examined the relationship between teachers' individual innovativeness and their teacher professionalism. The participants were 567 teachers working in elementary, middle and high schools located across Istanbul. The data were gathered through the "Individual Innovativeness Scale" and the "Teacher Professionalism Scale". In data analysis, arithmetic means and Pearson Product-Moment Correlation Analysis were used. The results of the study showed that the teachers' characteristics of individual innovativeness fell into the group of early majority. The teachers' innovativeness was found to be at the highest level in the dimension of openness to experience. There was a weak positive relationship between the individual innovativeness characteristics of openness to experience and opinion-leading, and teacher professionalism, which was significant .

**Avadhanam & Chand (2016)** investigated the individual traits that underpin innovative teaching in India's public elementary schools. They emphasized how intrinsic motivation, self-efficacy, proactive personality, openness to experience, and perceived job complexity are critical correlates of teacher innovativeness. The study argued that bolstering these traits through focused training could significantly enhance educational outcomes.

## **3. METHOD OF THE STUDY**

In this study Descriptive survey method was used.

### **POPULATION**

All senior secondary school teachers of Prayagraj district were considered as population.

### **SAMPLE AND SAMPLING TECHNIQUE**

The sample was selected by using stratified random sampling technique. A sample of 180 senior secondary teachers were selected for the present study.

### **STATISTICAL ANALYSIS USED**

The analysis and interpretation of the data was done by calculating the mean, SD, t-value.

## **4. RESULT AND DISCUSSION**

**Objective 4.1:** To compare the innovativeness of male and female senior secondary school teachers.

**Hypothesis. 4.1.:** There is no significant difference in the innovativeness of male and female senior secondary school teachers.

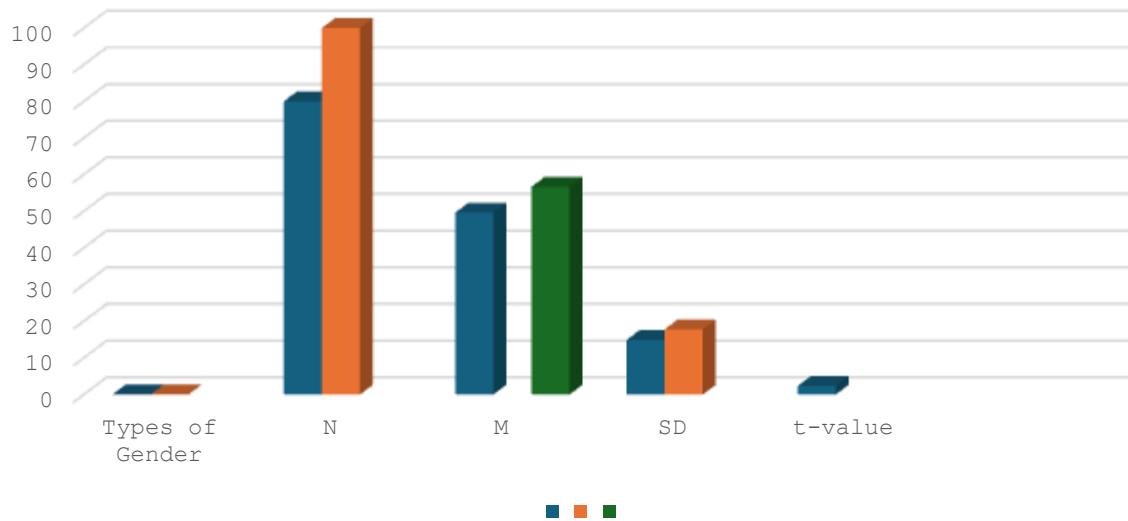
**Table 4.1:** Showing Mean, SD, t-value of innovativeness of male and female senior secondary school teachers

Types of Gender	N	M	SD	t-value
Male	80	49.58	14.88	2.392
Female	100	56.61	17.79	

\*0.05 percent level of significance.

The table 4.1. value of t at 0.05 level at  $df=178$  is 1.97, which is less than our calculated t value which is 2.392. Hence our calculated t value is significant at 0.05 levels. It is observed from table-4.1. that the mean of male senior secondary school teachers towards innovativeness is 49.58 and S.D is 14.88. The mean of female senior secondary school teachers towards innovativeness is 56.61 and S.D is 17.79, therefore it can be concluded there was significant difference between the innovativeness of male and female of senior secondary school teachers. So, it indicated that female senior secondary school teachers are more innovative as compared to male senior secondary school teachers towards innovativeness. Hence the null hypothesis is rejected.

### Representing mean of innovativeness of male and female senior secondary school teachers



**Figure 4.1:** Graph representing mean of innovativeness of male and female senior secondary school teachers.

## 5. CONCLUSION

The results reveal a significant difference in the innovativeness of senior secondary school teachers on the basis of gender. Analysis from Table 4.1. shows that female teachers ( $M = 56.61$ ,  $SD = 17.79$ ) scored higher in innovativeness than male teachers ( $M = 49.58$ ,  $SD = 14.88$ ). The calculated  $t$ -value (2.392) exceeded the table value (1.97) at the 0.05 level, confirming statistical significance. Therefore, the null hypothesis is rejected. It is concluded that female senior secondary school teachers demonstrate greater innovativeness compared to their male counterparts.

This finding shows the importance of gender in developing the innovativeness of senior secondary school teachers. The fact that female teachers scored higher than male teachers indicates that women in the teaching profession prefer to be more creative and original in their work. The fact that they are eager to learn about new concepts, approaches, and ways of doing things indicates a greater degree of flexibility and receptiveness to change, which are also primary elements of innovativeness. That this difference is statistically confirmed is an indication of the fact that the difference is not a chance occurrence, but it indicates a true pattern. In a practical sense, the discovery highlights the possibility

of the female teacher to play a more active role in educational innovations, classroom advancements, and the overall improvement of the teaching and learning practice than their male colleagues.

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