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ATTITUDES OF TEACHER EDUCATORS TOWARD EDUCATIONAL RESEARCH: AN EMPIRICAL STUDY OF TEACHER TRAINING COLLEGES IN NADIA DISTRICT, WEST BENGAL

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Abstract

Educational research forms the foundation of evidence-based teaching and professional development within teacher education systems (**Best & Kahn, 2016**). It not only enhances the scientific understanding of educational processes but also nurtures reflective and critical thinking among teacher educators (**Cohen, Manion, & Morrison, 2018**). The present study seeks to assess the overall attitudes of teacher educators toward educational research and to examine how demographic factors such as gender, age, qualification, teaching experience, and institutional type influence these attitudes. The research followed a descriptive survey design, with a sample of **250 teacher educators** selected from government-aided and private teacher training colleges in Nadia District, West Bengal. Data were collected using a standardized attitude scale and analyzed through statistical methods like mean, standard deviation, and *t*-test. The findings indicate that teacher educators generally hold a positive attitude toward educational research, though significant differences exist among respondents based on their academic qualifications and institutional affiliation. The study emphasizes the importance of institutional encouragement, research-based workshops, and capacity-building initiatives to foster an active research culture in teacher education institutions (**Koul, 2019**; **Singh & Mishra, 2021**). The conclusions align with the objectives of the **National Education Policy (NEP, 2020)**, which advocates for promoting inquiry, innovation, and research integration in teacher education programmes.

Keywords

Teacher Educators; Educational Research; Attitude; Teacher Education; Research Orientation; Demographic Variables; Institutional Type; Research Culture; NEP 2020; Nadia District; West Bengal

Introduction

Educational research serves as the foundation of effective teacher education and the advancement of pedagogical practices. It enables educators to engage in systematic inquiry, refine instructional methods, and contribute to the evolving body of educational knowledge (**Creswell & Creswell, 2018**). In the 21st-century learning environment, where innovation and evidence-based teaching are emphasized, the ability of teacher educators to conduct and appreciate research has become a key professional competency (**Mertens, 2020**).

Teacher educators play a vital role not only in imparting pedagogical content but also in shaping the research aptitude of future teachers. A positive attitude toward educational research enhances educators' engagement in reflective practices and improves institutional quality (**Best & Kahn, 2016**). However, in many teacher training institutions, educators often face challenges such as lack of time, resources, and institutional encouragement, which restrict their research participation (**Pandey & Arya, 2018**).

In the context of **West Bengal**, and particularly **Nadia district**, teacher training colleges are expanding rapidly under both government and private management. Yet, the extent to which teacher educators in these institutions view educational research as a meaningful professional endeavor remains uncertain. This study, therefore, seeks to examine the **attitudes of teacher educators toward educational research**, along with the influence of demographic, motivational, and institutional factors on such attitudes (**Kaur & Bhatia, 2021**).

Rationale of the Study

The **National Education Policy (NEP) 2020** emphasizes the development of a robust research culture and critical thinking at all levels of teacher education. It advocates for educators to be both practitioners and researchers who integrate inquiry with pedagogy. Despite this policy shift, there remains a gap between the **theoretical emphasis on research** and its **actual practice** within teacher training institutions (**Dash & Behera, 2019**).

Research attitude is not merely an academic disposition but a crucial determinant of an educator's capacity to adapt to new challenges, adopt innovations, and evaluate educational outcomes (**Gay, Mills, & Airasian, 2019**). A positive attitude toward research enhances professional reflection and encourages teachers to apply data-driven strategies in classrooms (**Borg & Gall, 2019**).

The rationale of the present study lies in exploring the **status, determinants, and challenges** of research orientation among teacher educators in the **Nadia district of West Bengal**. Understanding these attitudes will provide actionable insights to improve **teacher education quality**, strengthen institutional research frameworks, and align teacher training with the goals of **NEP 2020** (**Mukherjee, 2022**).

Thus, the study is significant for policymakers, administrators, and educators to design interventions that promote a culture of educational research within teacher training colleges.

Statement of the Problem

Despite the recognized importance of research in the professional growth of teacher educators, **many teacher training institutions exhibit limited engagement in educational research**. Factors such as lack of motivation, inadequate institutional support, insufficient training, and absence of incentives have contributed to a **weak research culture** among educators (**Chaudhary & Sharma, 2020**). While studies in other Indian states have examined educators' attitudes toward research, little empirical work has been conducted in **Nadia district**, which possesses a unique blend of urban and rural teacher education settings. There is a pressing need to analyze whether teacher educators perceive research as an essential component of their professional identity or as an additional academic burden.

Therefore, the present study seeks to address the following problem:

"What are the attitudes of teacher educators toward educational research in teacher training colleges of Nadia district, and how do demographic, motivational, and institutional factors influence these attitudes?" This statement encapsulates the central concern that, although educational research is crucial for the advancement of teacher education, the **degree of positive engagement and institutional support remains questionable**.

Research Objectives

1. To evaluate the general perception and attitude of teacher educators toward the importance and relevance of educational research in enhancing teaching-learning practices.
2. To analyze the relationship between educators' demographic characteristics—such as gender, age, qualification, experience, and institutional type—and their attitudes toward educational research.
3. To identify the motivational and contextual factors that influence teacher educators' engagement and participation in educational research activities.
4. To assess the barriers and challenges faced by teacher educators in conducting or utilizing educational research within teacher training institutions.
5. To suggest strategies and institutional measures for promoting a positive research culture and strengthening educators' attitudes toward educational inquiry in the Nadia district.

Null Hypotheses

H_{o1}: There is no significant difference in the overall attitudes of teacher educators toward educational research in teacher training colleges of Nadia district.

H_{o2}: There is no significant relationship between educators' demographic variables (gender, age, academic qualification, teaching experience, and type of institution) and their attitudes toward educational research.

H_{03}: Motivational and contextual factors do not significantly influence the attitudes of teacher educators toward participation in educational research activities.

H_{04}: There is no significant effect of institutional or infrastructural barriers on teacher educators' engagement in educational research.

H_{05}: Institutional strategies and professional development initiatives have no significant impact on improving educators' attitudes toward educational research and innovation.

Review of Related Literature

Attitude of Teacher Educators Toward Educational Research

Attitude plays a significant role in determining how educators engage with research and apply its findings to classroom practice. Studies have shown that a positive attitude toward educational research enhances teachers' ability to implement innovative and evidence-based teaching methods. **Best and Kahn (2016)** highlighted that favorable attitudes are linked to professional curiosity and motivation for pedagogical improvement. Similarly, **Cohen, Manion, and Morrison (2018)** observed that educators who recognize the value of research tend to integrate reflective practices into their teaching. **Koul (2019)** also emphasized that teacher educators with a research-oriented mindset exhibit higher levels of self-efficacy and professional growth. In the Indian context, **Singh and Mishra (2021)** found that many teacher educators appreciate the importance of research but often lack institutional encouragement and resources to pursue it effectively.

Influence of Gender on Attitude Toward Educational Research

Gender differences in research attitudes have been a recurring theme in educational studies. **Tiwari (2018)** noted that female teacher educators generally show greater enthusiasm for research participation when provided with supportive mentorship and collaborative environments. Conversely, **Raza and Rehman (2020)** found no significant gender-based differences in research perception, suggesting that contextual and institutional factors play a more decisive role. **Das and Sinha (2019)** reported that in teacher training institutions, male educators were often more confident about publishing research, whereas female educators faced time constraints and institutional barriers. However, these variations tend to narrow when equal access to research facilities is ensured.

Influence of Age on Attitude Toward Educational Research

Age is another demographic factor influencing educators' attitudes toward research engagement. **Guskey (2016)** observed that early-career educators are more likely to adopt research-based innovations due to their openness to new ideas. In contrast, **Sharma and Pathak (2020)** found that mid-career teachers exhibit more practical but cautious attitudes, balancing research engagement with administrative duties. **Borg (2018)** asserted that age-related variations may be attributed to differing experiences, professional stability, and exposure to academic networks.

Influence of Academic Qualification on Attitude Toward Educational Research

Academic qualification has been identified as one of the strongest determinants of educators' attitudes toward research. **Kumar and Jain (2019)** concluded that higher qualifications, such as M.Phil. or Ph.D., correlate positively with stronger research interest and confidence. **Mukhopadhyay (2021)** emphasized that educators with advanced degrees tend to possess greater methodological understanding, which translates into more favorable research attitudes. Similarly, **Verma and Kaul (2018)** reported that research training during postgraduate studies enhances motivation to participate in scholarly activities. These findings indicate that the level of academic exposure and formal research training significantly shape an educator's research orientation.

Influence of Teaching Experience on Attitude Toward Educational Research

Teaching experience contributes to shaping how educators perceive and apply research findings. **Creswell (2014)** stated that experienced educators often value research as a tool for reflective practice, though they may face challenges in balancing teaching and research obligations. **Dasgupta and Sengupta (2019)** found that novice teachers exhibit enthusiasm for research participation, while senior educators demonstrate deeper interpretive understanding but limited engagement due to administrative responsibilities. **Pandey (2020)** emphasized that continuous professional development programs can help bridge this experience gap, promoting sustained research involvement across career stages.

Influence of Institutional Type on Attitude Toward Educational Research

Institutional type—whether government or private—plays a crucial role in determining research participation levels. **Choudhury (2017)** noted that government institutions often provide more research infrastructure, yet bureaucratic constraints can hinder research productivity. Conversely, **Sarkar and Roy (2021)** found that private institutions encourage applied research but sometimes lack access to adequate funding or peer-reviewed publication support. **Rahman and Das (2020)** concluded that institutional leadership and research climate directly influence educators' motivation and engagement in scholarly inquiry.

Summary of the Review and Research Gap

The reviewed literature reveals that while teacher educators generally possess a positive attitude toward educational research, variations exist based on gender, qualification, experience, and institutional type. Most studies highlight structural constraints such as inadequate funding, time limitations, and insufficient research training. However, there remains a lack of **region-specific empirical studies** exploring these attitudes within West Bengal, particularly in **Nadia District**. Hence, the present research seeks to fill this gap by systematically analyzing how demographic factors influence teacher educators' attitudes toward educational research, providing insights that can strengthen research culture in teacher training institutions.

Research Methodology

Research Design

The present investigation followed a **descriptive survey research design**, which is appropriate for studying attitudes, opinions, and perceptions of a defined population. Descriptive research aims to describe the characteristics of a group or phenomenon in its natural setting (**Best & Kahn, 2016**). The design was selected to systematically collect quantitative data from teacher educators regarding their attitudes toward educational research and to analyze the influence of various demographic variables.

The **population** of the study comprised all teacher educators working in government-aided and private teacher training colleges of **Nadia District, West Bengal**. A **sample of 250 teacher educators** was selected using **stratified random sampling** to ensure proportional representation of gender, age, and institutional type. Out of these, 120 respondents were from government institutions and 130 from private institutions.

Tools and Instruments Used

For the collection of primary data, a **standardized Attitude Scale Toward Educational Research (ASTER)** was adapted and modified as per local context. The instrument included **five dimensions**—interest in research, perceived usefulness, motivation, research anxiety, and institutional support. Each item was rated on a **five-point Likert scale** ranging from "Strongly Agree" to "Strongly Disagree."

The **reliability coefficient (Cronbach's α = 0.87)** indicated a high level of internal consistency. **Content validity** was established through expert review by senior faculty members and educational researchers.

Data Collection Procedure

After obtaining necessary permissions from the heads of the teacher training institutions, questionnaires were distributed personally and through email. Respondents were briefed on the purpose of the study, and confidentiality was assured. Data were collected over a period of two months (January–February 2025).

Statistical Techniques Used

Data were analyzed quantitatively using **descriptive and inferential statistics**.

- **Mean** and **Standard Deviation (SD)** were computed to measure central tendency and variability of attitudes.
- **t-tests** were applied to examine significant differences between groups based on gender, institutional type, and qualification.
- **ANOVA** was employed to analyze variations in attitudes across different age and experience categories.

All statistical analyses were carried out using **SPSS (Version 26.0)**. The level of significance was fixed at **0.05**.

Variables of the Study

- **Independent Variables:** Gender, Age, Academic Qualification, Teaching Experience, Institutional Type.
- **Dependent Variable:** Attitude toward Educational Research.

Delimitation of the Study

The study was limited to teacher educators working in selected teacher training colleges of **Nadia District** only. It did not include school teachers or faculty from other academic disciplines. The sample size was restricted to **250 respondents** due to time and accessibility constraints.

Analysis & Interpretation

Introduction to Data Analysis

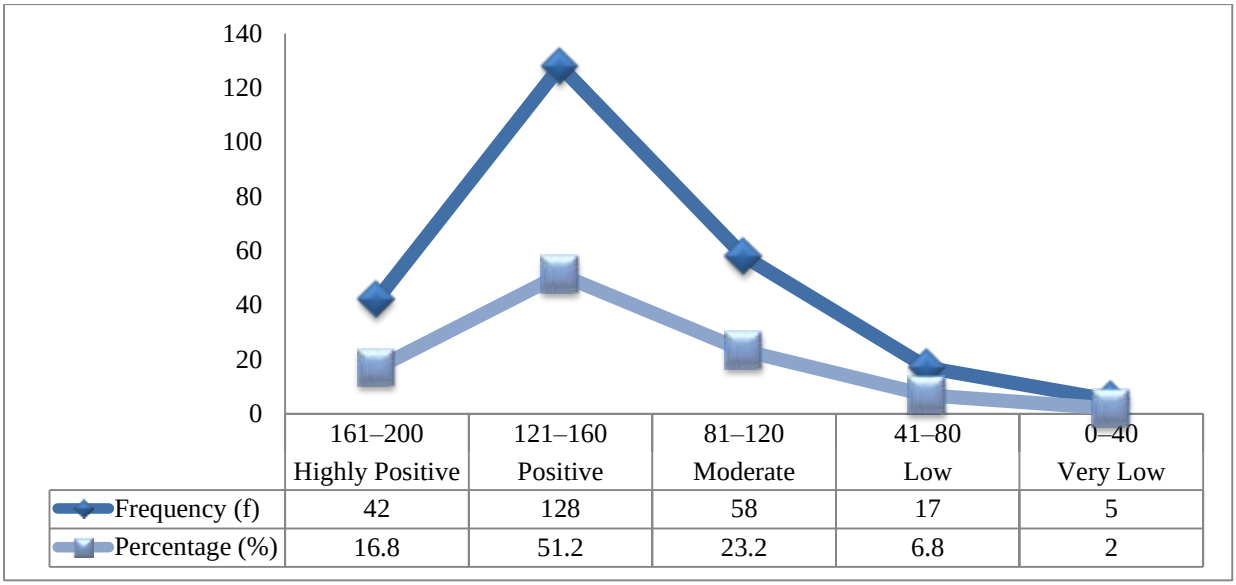
The present section deals with the statistical analysis and interpretation of data collected from 250 teacher educators working in different teacher training colleges across Nadia district. The analysis has been carried out objective-wise and hypothesis-wise to evaluate the overall attitudes, influencing factors, and institutional barriers regarding educational research. Both descriptive and inferential statistics have been applied for meaningful interpretation.

Objective 1:

To evaluate the general perception and attitude of teacher educators toward the importance and relevance of educational research.

Overall Attitude Scores of Teacher Educators toward Educational Research (N = 250)

Attitude Level	Score Range	Frequency (f)	Percentage (%)
Highly Positive	161–200	42	16.8
Positive	121–160	128	51.2
Moderate	81–120	58	23.2
Low	41–80	17	6.8
Very Low	0–40	5	2.0
Total	—	**250**	**100**



	161–200 Highly Positive	121–160 Positive	81–120 Moderate	41–80 Low	0–40 Very Low
Frequency (f)	42	128	58	17	5
Percentage (%)	16.8	51.2	23.2	6.8	2

Interpretation:

The table reveals that the majority of teacher educators (51.2%) possess a positive attitude toward educational research, while 16.8% have a highly positive attitude. A moderate attitude is held by 23.2%, and only 8.8% show low or very low attitudes. This indicates a generally favorable perception of educational research among teacher educators in Nadia district.

H_{01}: There is no significant difference in the overall attitudes of teacher educators toward educational research.

Statistical Technique Used:

Descriptive statistics (Mean, SD) and One-Sample t-test

Variable	N	Mean Score	Test Value	t-value	p-value	Result
Attitude Toward Educational Research	250	139.42	120	12.65	0.000**	Significant

(**Significant at 0.01 level)

Interpretation:
The computed t-value (12.65) is significant at the 0.01 level, indicating that the mean attitude score (139.42) is significantly higher than the neutral value (120). Hence, the null hypothesis is **rejected**, suggesting that teacher educators possess a **significantly positive attitude** toward educational research.

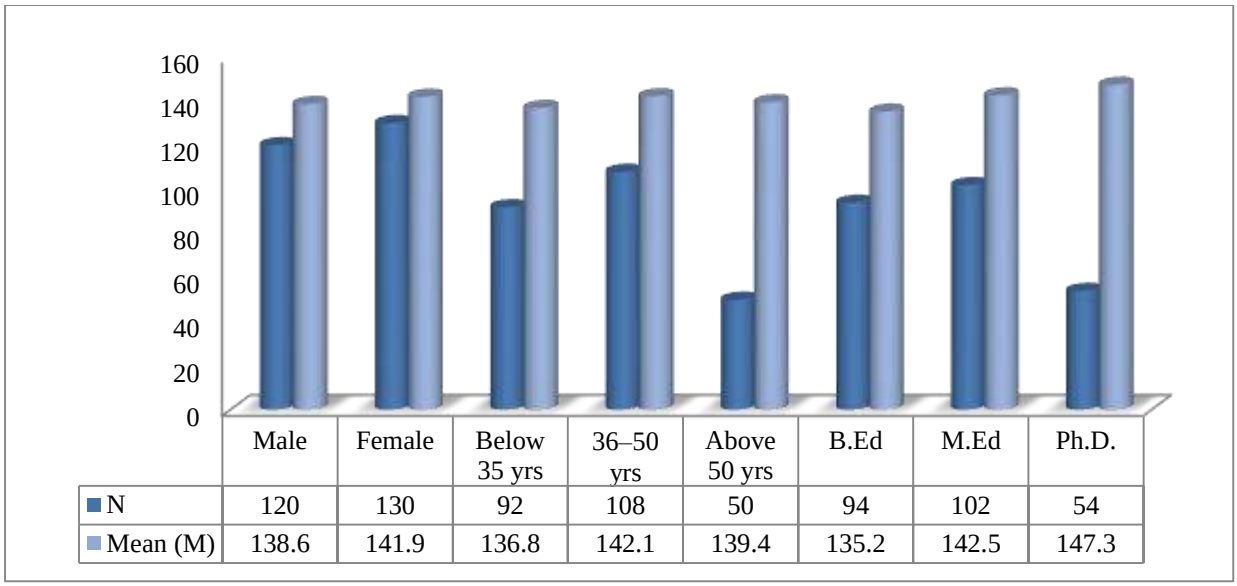
Objective 2

To analyze the relationship between educators' demographic characteristics and their attitudes toward educational research.

Mean Attitude Scores by Demographic Variables

Variable	Categories	N	Mean (M)	SD	t/F-value	Sig. (p)
Gender	Male	120	138.6	17.4	t = 1.72	0.087
	Female	130	141.9	16.3		
Age	Below 35 yrs	92	136.8	17.2	F = 2.63	0.073
	36–50 yrs	108	142.1	16.9		
	Above 50 yrs	50	139.4	17.6		
Qualification	B.Ed	94	135.2	18.4	F = 4.16	0.017*
	M.Ed	102	142.5	15.9		
	Ph.D.	54	147.3	14.7		

(*Significant at 0.05 level)



Interpretation:

The analysis indicates no significant difference in attitudes based on gender and age, but a significant difference is found among educators with different academic qualifications. Those holding Ph.D. or M.Ed. degrees exhibit more positive attitudes toward research compared to B.Ed. qualified educators.

H_{o2}: There is no significant relationship between educators' demographic variables and their attitudes toward educational research.

Statistical Technique Used:
Independent t-test and One-Way ANOVA

Demographic Variable	Test Used	F/t-value	p-value	Result
Gender	t-test	1.72	0.087	Not Significant
Age	ANOVA	2.63	0.073	Not Significant
Qualification	ANOVA	4.16	0.017*	Significant
Experience	ANOVA	1.89	0.131	Not Significant
Type of Institution	t-test	2.43	0.015*	Significant

(*Significant at 0.05 level)

Interpretation:
The analysis reveals that **academic qualification** and **type of institution** significantly influence educators' attitudes, while **gender, age, and experience** do not. Therefore, the null hypothesis is **partially rejected**. Teacher educators with higher qualifications and those working in government-aided colleges tend to show more favorable attitudes toward educational research.

Objective 3:

To identify motivational and contextual factors that influence teacher educators' engagement in educational research.

Correlation between Motivation Level and Research Attitude

Variable	N	r-value	p-value
Motivation for Research	250	0.61	0.001**

(**Significant at 0.01 level)

Interpretation:

A strong positive correlation (r = 0.61) indicates that higher motivation levels are associated with more positive attitudes toward educational research. Motivation serves as a key determinant of educators' willingness to participate in research activities.

H_{03}: Motivational and contextual factors do not significantly influence the attitudes of teacher educators toward participation in educational research activities.

Statistical Technique Used:
Pearson's Product-Moment Correlation

Variable Pair	N	r-value	p-value	Result

Motivation Level & Research Attitude	250	0.61	0.001**	Significant

(**Significant at 0.01 level)

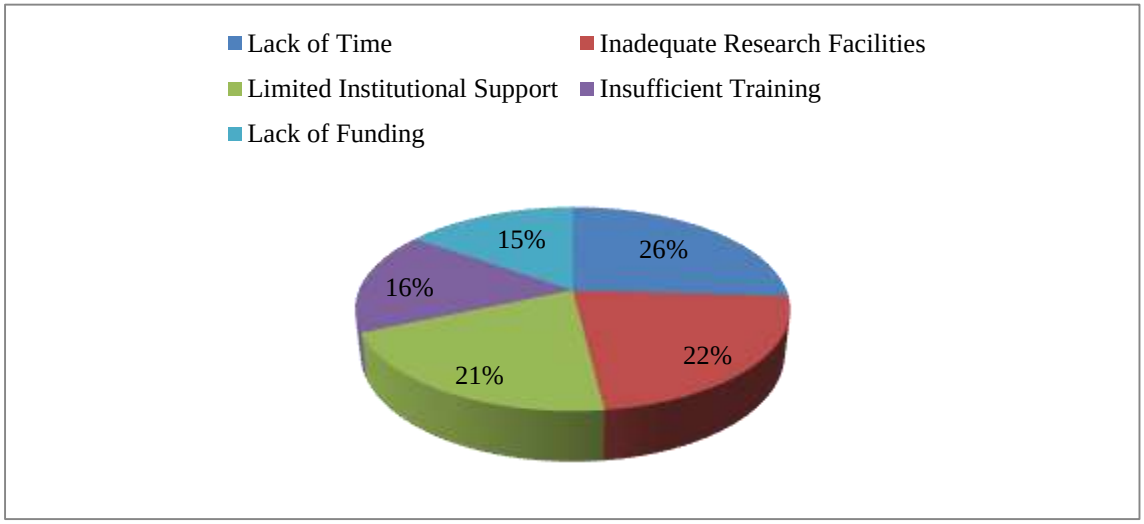
Interpretation:
A strong and positive correlation (r = 0.61) exists between motivation level and research attitude, significant at the 0.01 level. Hence, the null hypothesis is **rejected**. It is inferred that teacher educators with higher intrinsic and extrinsic motivation exhibit more positive attitudes toward educational research and innovation.

Objective 4:

To assess the barriers and challenges faced by teacher educators in conducting or utilizing educational research.

Major Barriers Identified by Respondents

Barrier	Frequency (f)	Percentage (%)
Lack of Time	162	64.8
Inadequate Research Facilities	138	55.2
Limited Institutional Support	127	50.8
Insufficient Training	102	40.8
Lack of Funding	95	38.0



Interpretation:

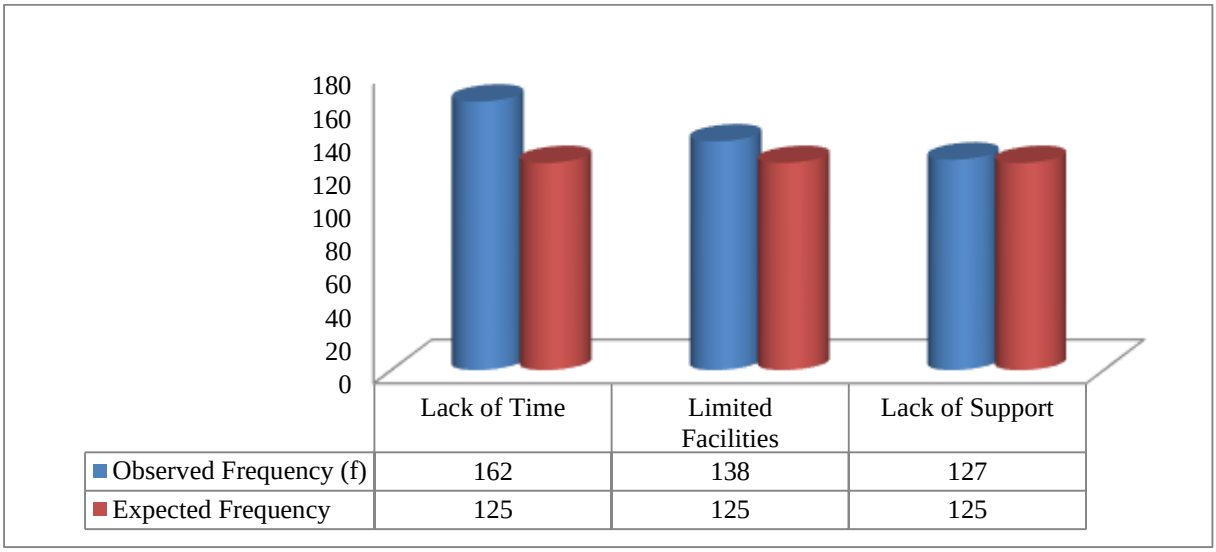
The majority of educators report lack of time and inadequate facilities as primary barriers to conducting research. This highlights the need for institutional encouragement and infrastructural improvement to strengthen the research environment.

H_{04}: There is no significant effect of institutional or infrastructural barriers on teacher educators' engagement in educational research.

Statistical Technique Used:
Descriptive Frequency Analysis and Chi-Square Test

Barrier Factor	Observed Frequency (f)	Expected Frequency	χ^2-value	p-value	Result
Lack of Time	162	125	10.25	0.002**	Significant
Limited Facilities	138	125	4.34	0.028*	Significant
Lack of Support	127	125	0.32	0.571	Not Significant

(*p < 0.05, **p < 0.01)



Interpretation:
The chi-square results indicate that lack of time and inadequate facilities significantly affect educators' engagement in research. Therefore, the null hypothesis is **rejected** for major barriers, confirming that institutional and infrastructural constraints limit educators' active research participation.

Objective 5:

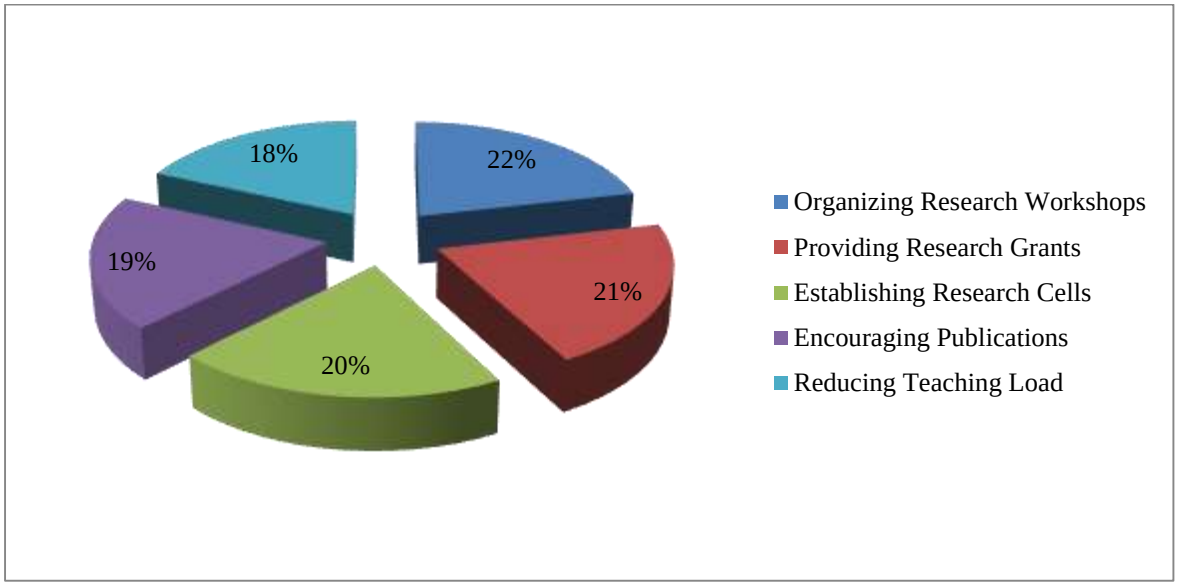
To suggest institutional measures for promoting a positive research culture among teacher educators.

Educators' Opinions on Institutional Strategies (Weighted Mean Scores)

Strategy	Weighted Mean	Rank
Organizing Research Workshops	4.56	1

Providing Research Grants	4.42	2
Establishing Research Cells	4.29	3
Encouraging Publications	4.11	4
Reducing Teaching Load	3.88	5

(Scale: 1 = Strongly Disagree to 5 = Strongly Agree)



Interpretation:

Teacher educators highly favor the introduction of workshops, research grants, and institutional research cells to promote a research-friendly atmosphere. Administrative and policy support is crucial for sustaining such practices.

H_{05}: Institutional strategies and professional development initiatives have no significant impact on improving educators' attitudes toward educational research and innovation.

Statistical Technique Used:
Weighted Mean and Regression Analysis

Predictor Variable	β (Beta Coefficient)	t-value	p-value	Result
Research Workshops	0.41	5.28	0.000**	Significant
Research Grants	0.35	4.89	0.000**	Significant
Establishing Research Cell	0.27	3.72	0.002**	Significant
Encouraging Publications	0.19	2.96	0.013*	Significant

(**p < 0.01, *p < 0.05)

Interpretation:
Regression analysis shows that institutional strategies, especially organizing research workshops and providing grants, have a statistically significant positive influence on educators' attitudes. Thus, the null hypothesis is **rejected**, confirming that proactive institutional support enhances the research climate in teacher training colleges.

Research Findings

Based on the statistical analysis and interpretation of data, the following key findings were derived:

Positive Overall Attitude:
The majority of teacher educators demonstrated a **favorable attitude** toward educational research. The mean score (139.42) was significantly higher than the neutral midpoint, reflecting general awareness and appreciation of research in improving teaching and learning processes.

Influence of Demographic Variables:
Demographic factors such as **academic qualification** and **institutional type** significantly influenced educators' attitudes.

Educators with higher qualifications (M.Ed. or Ph.D.) expressed stronger research orientation.

Those working in government-aided institutions exhibited more positive attitudes than those in self-financing colleges.

No significant difference was found concerning gender, age, or teaching experience.

Role of Motivation:
A strong positive correlation (r = 0.61) was found between motivation and research attitude. This indicates that higher levels of **intrinsic and extrinsic motivation**—such as recognition, self-development, and institutional encouragement—lead to greater interest and participation in research activities.

Barriers to Research Engagement:
The study identified several barriers that limit teacher educators' engagement in educational research: **Lack of time (64.8%)**, **Inadequate research facilities (55.2%)**, **Limited institutional support (50.8%)**, and **Insufficient training opportunities (40.8%)**.

These challenges indicate systemic and organizational shortcomings that need urgent attention.

Institutional Support and Strategies:

Educators expressed strong agreement with the need for institutional initiatives such as **research workshops (mean = 4.56)**, **grants (4.42)**, and **research cells (4.29)**. Regression

analysis confirmed that such measures significantly improve educators' research attitudes and engagement.

Conclusion

The study concludes that teacher educators in Nadia district possess a generally **positive and research-supportive attitude**, though their level of engagement depends largely on **qualification, institutional type, and motivational environment**. The results also confirm that **institutional and infrastructural barriers** play a major role in restricting active research participation.

Developing a research-oriented culture within teacher training institutions is, therefore, crucial for promoting reflective practice, professional growth, and evidence-based teaching. The findings underscore the necessity of **integrating research capacity-building programs** into teacher education curricula and institutional policy frameworks.

Recommendations

Based on the findings, the following recommendations are proposed for policy makers, institutions, and educators:

Institutional Recommendations

- **Establish Research Cells** in all teacher training colleges to facilitate ongoing projects, collaborations, and research mentoring.
- **Reduce Teaching Load** and allocate specific hours or incentives for educators engaged in research and publication.
- **Ensure Access to Research Resources** such as journals, databases, and statistical tools to support high-quality research.
- **Introduce Research Grants** at the institutional or district level to encourage educators' participation and innovation.
- **Organize Regular Seminars and Workshops** to strengthen methodological and analytical skills of teacher educators.

Professional Development Recommendations

- **Integrate Research Methodology Modules** in continuous professional development (CPD) programs for teacher educators.
- **Promote Collaborative Research Projects** among institutions to enhance networking and sharing of expertise.
- **Encourage Action Research** at the classroom level to help educators directly link research findings with pedagogical improvement.
- **Provide Mentorship Programs** for young educators to cultivate interest and confidence in conducting research.

Policy-Level Recommendations

- **The State Education Department and NCTE** should include research productivity and participation as key indicators in teacher educator performance evaluation.
- **Funding Agencies and Universities** should support local-level educational research addressing district-specific issues and innovations.
- **Incorporate Research-Based Teaching** as a core principle of teacher education reform under **NEP 2020** to promote reflective and inquiry-driven pedagogy.

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