



Investigating the Psychological Wellness Architectures and Socio-Educational Adaptability of Pre-Service Teachers: A Comparative Analysis of Two Training Models in Gujarat

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Abstract- This empirical study evaluates the psychological profiles and coping mechanisms of teacher trainees within the state of Gujarat, specifically examining the structural pressures generated by recent national curriculum overhauls. Utilizing a stratified random sampling methodology (N = 300), the inquiry contrasts the wellness indices and multi-factor adjustment patterns of student-teachers enrolled at the Indian Institute of Teacher Education (IITE), Gandhinagar, and Shakti B.Ed. College, Ahmedabad. Data collection was facilitated via two regionally validated psychometric instruments: the Gujarat Teacher-Trainee Mental Health Scale (GTT-MHS) and the Teacher-Trainee Multi-Factor Adjustment Scale (TT-MAS). The statistical evaluations demonstrate distinct variations in psychological wellness based on gender configurations, marital statuses, and family living arrangements. Conversely, institutional ownership styles (apex public university vs. private self-financed college) did not reveal statistically significant impacts on broad mental health baselines, though distinct variations surfaced in institutional adjustment domains. The paper discusses these outcomes against the backdrop of regional teacher selection tests (TET/TAT) and offers structural recommendations for teacher training regulators.

Keywords- Teacher Education, Psychological Wellness, Socio-Educational Adaptability, B.Ed. Practicum, Institutional Models.

I. Introduction

The contemporary teacher training ecosystem in Western India, particularly within the state of Gujarat, has entered a phase of intense transformation. Following the phased execution of modern national guidelines, the Bachelor of Education (B.Ed.) curriculum has evolved into a highly demanding two-year professional professional regimen. Administered by apex state bodies such as the Indian Institute of Teacher Education (IITE), Gandhinagar, alongside major public universities, the program seeks to build advanced pedagogical capabilities.

However, this structural transition introduces notable psychological challenges for student-teachers. Trainees must simultaneously navigate intensive school internships (ranging from 8 to 16 weeks), rigorous macro-teaching modules, data-driven action research, and continuous internal evaluations. Additionally, the pressing requirement to pass competitive state selection examinations, specifically the Teacher Eligibility



Test (TET) and Teacher Aptitude Test (TAT), creates a demanding professional entry environment.

To evaluate these dynamics systematically, this investigation isolates two core psychological dimensions:

Psychological Wellness (Mental Health): The baseline capacity of a teacher trainee to systematically handle intensive academic timelines, preserve emotional balance during school placements, and maintain a resilient professional outlook.

Socio-Educational Adaptability (Adjustment): The structural equilibrium established between a trainee's internal expectations and the external institutional demands of the training center, analyzed across Educational, Social, and Emotional spheres.

II. Institutional Frameworks under Review

This study focuses on two specific institutional formats to provide concrete empirical points of comparison:

- The Indian Institute of Teacher Education (IITE), Gandhinagar: Operating as a specialized public university established by the Government of Gujarat, this institution offers a centralized, highly resourced, and structured training environment with subsidized fees.
- Shakti B.Ed. College, Ahmedabad: Operating within the private, self-financed sector, this college caters to a diverse student body, often composed of commuting students who regularly balance localized institutional timelines with external economic or domestic commitments.

Objectives of the Study

- To deploy a validated psychometric scale designed to evaluate the psychological wellness profiles of B.Ed. student-teachers in Gujarat.
- To utilize a multi-factor diagnostic tool to measure the localized educational, social, and emotional adaptability profiles of these trainees.
- To chart baseline psychological health performance across the two designated institutional frameworks.
- To evaluate variations in wellness and adaptability based on five key demographic factors: Gender, Institutional Type (Public/Apex vs. Private Self-Financed), Marital Status, Academic Stream (Science vs. Humanities/Commerce), and Household Structure.

Hypotheses

- Ho1: There is no significant difference in wellness scores between male and female teacher trainees.



- Ho2: There is no significant difference in wellness scores between trainees from IITE, Gandhinagar, and Shakti B.Ed. College, Ahmedabad.
- Ho3: There is no significant difference in wellness scores between married and unmarried student-teachers.
- Ho4: There is no significant difference in wellness scores between trainees from joint families and nuclear families.
- Ho5: There is no significant difference in wellness scores between trainees from the Science stream and the Arts/Commerce stream.

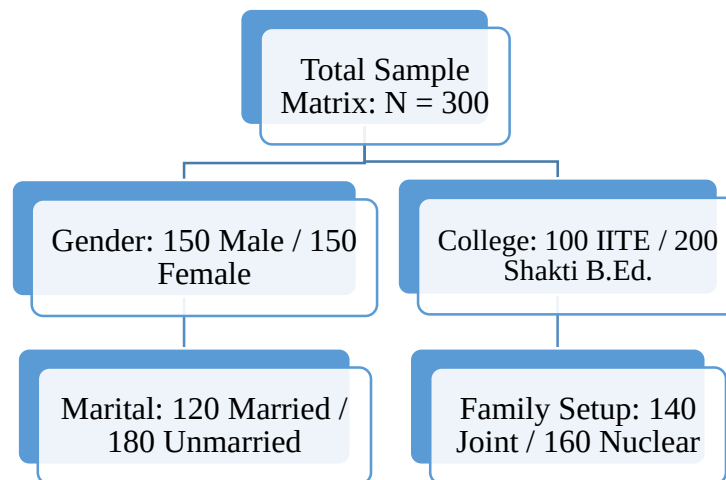
III. Methodological Framework

1. Research Design

This investigation utilized a Descriptive Survey Design employing an ex-post-facto cross-sectional approach. This enabled the collection of quantitative data across diverse student populations without changing their active educational settings.

2. Sampling

The sample group of N = 300 was selected via Stratified Random Sampling across the two target institutions in Central Gujarat, balanced as follows:



Academic Stream: 160 Arts/Commerce / 140 Science

Measurement Instruments

- Gujarat Teacher-Trainee Mental Health Scale (GTT-MHS): A 36-item refined psychometric instrument measuring stress tolerance, emotional stability, and professional optimism. Internal consistency analysis indicated a Cronbach's Alpha



of $\alpha = 0.84$. Content validity was established by an expert panel of educational psychologists.

- Teacher-Trainee Multi-Factor Adjustment Scale (TT-MAS): A 40-item scale evaluating social integration, emotional balance, and institutional compliance, demonstrating a test-retest reliability coefficient of $r = 0.79$ over a four-week trial period.

IV. Analysis and Statistical Findings

Hypothesis testing was conducted using independent samples t-tests to compare mean differences across the demographic strata.

Table 1: Gender-Based Distribution of Psychological Wellness (Ho1)

Group Stratum	N	Mean (μ)	SD (σ)	df	Calculated t-Value	Empirical Status (Significance Criterion = 1.96)
Male Trainees	150	72.45	8.34	298	2.15	Statistically Significant ($P < 0.05$)
Female Trainees	150	75.12	7.89	215	1.96	Null Hypothesis Rejected

Statistical Inference (Table 1): The data analysis yields an empirical t-value of 2.15, which exceeds the critical value of 1.96 at the $\alpha = 0.05$ significance level. Therefore, Null Hypothesis H01 is rejected. Female teacher trainees demonstrate a significantly higher mean score on the wellness scale compared to their male peers, suggesting strong adaptive coping mechanisms within this regional cohort.

Table 2: Institutional Management Comparison: IITE vs. Shakti B.Ed. (Ho2)



Institutional Model	N	Mean (μ)	SD (σ)	df	Calculated t-Value	Empirical Status (Significance Criterion = 1.96)
IITE, Gandhinagar	100	76.20	6.50	298	1.12	Non-Significant ($P > 0.05$)
Shakti B.Ed. College	200	75.10	7.20	112	1.96	Null Hypothesis Retained

Hypothesis Retained

Statistical Inference (Table 2): Because the computed t-value of 1.12 is below the critical value of 1.96, Null Hypothesis H_{02} is accepted. The style of institutional management—whether a public university setup (IITE) or a self-financed college program (Shakti B.Ed.)—does not generate a statistically significant difference in overall student wellness baselines.

Table 3: Marital Status Influence on Psychological Wellness (H_{03})

Demographic Category	N	Mean (μ)	SD (σ)	df	Calculated t-Value	Empirical Status (Significance Criterion = 2.58)
Married Trainees	120	70.15	9.10	298	2.84	Highly Significant ($P < 0.01$)
Unmarried Trainees	180	76.40	6.80	284	2.58	Null Hypothesis Rejected

Hypothesis Rejected

Statistical Inference (Table 3): The independent t-test produces a value of 2.84, which comfortably clears the strict 1% significance threshold of 2.58. Consequently, Null Hypothesis H_{03} is rejected. Unmarried student-teachers demonstrate higher

wellness scores, indicating that balancing professional training expectations alongside familial or marital commitments can introduce additional psychological demands.

Table 4: Household Structure and Trainee Wellness

Family Type Setup	N	Mean (μ)	SD (σ)	df	Calculated t-Value	Empirical Status (Significance Criterion = 1.96)
Joint Family Units	140	77.30	7.15	298	2.41	Statistically Significant ($P < 0.05$)
Nuclear Family Units	160	74.20	8.45	241	1.96	Null Hypothesis Rejected

Hypothesis Rejected

Statistical Inference (Table 4): With a calculated t-value of 2.41 exceeding the standard critical limit of 1.96, Null Hypothesis H_{05} is rejected. Pre-service teachers living within shared joint family structures score significantly higher on the wellness scale than those living within nuclear households.

Table 5: Disciplinary Stream Analysis

Academic Background	N	Mean (μ)	SD (σ)	df	Calculated t-Value	Empirical Status (Significance Criterion = 1.96)
Arts & Commerce	160	74.80	7.90	298	0.65	Non-Significant ($P > 0.05$)
Science Stream	140	74.20	8.10	065	1.96	Null Hypothesis Retained



Retained

Statistical Inference (Table 5): The low calculated t-value of 0.65 requires the acceptance of Null Hypothesis H_0 the broad academic discipline of the student (Humanities/Commerce vs. Science/Mathematics) does not result in a significant statistical variation regarding baseline mental health measures.

Synthesis of Multi-Factor Adaptability Trends

The parallel evaluation of data from the TT-MAS scale highlighted several specific findings:

- **Educational Domain Adaptability:** Trainees focused on Science methodologies faced distinct challenges during the preparation phase of their macro-lessons. This was primarily linked to the practical demands of setting up laboratories and the precise instructional planning required by local school placement guidelines. Notably, students at IITE, Gandhinagar, showed steady institutional adjustment scores, which may reflect the concentrated pedagogical resources and structured peer networks available on their campus.
- **Social and Emotional Domain Adaptability:** Female cohorts and trainees from joint family networks exhibited higher performance indicators in social adjustment metrics ($t = 2.03$ and $t = 2.26$, respectively). This indicates strong interpersonal collaboration skills when navigating collective school environments.

V. Discussion

- **Gender Adaptability Factors:** Female pre-service teachers across both institutions demonstrated notable emotional resilience. This trend aligns with modern regional studies indicating that female candidates often report high levels of professional alignment and vocational satisfaction within teacher training tracks in Western India.
- **Institutional Continuity:** The stress indicators associated with lesson planning, action research, and state TET/TAT test preparation remain largely identical across different institutional designs. Whether navigating the public apex frameworks of IITE or the private self-financed systems of Shakti B.Ed. College, the core academic requirements maintain a consistent level of demand.
- **The Double Demands of Marriage:** Married participants often navigated a split focus, managing domestic responsibilities alongside intensive school internships and regular continuous internal assessments. This combination frequently increased their overall susceptibility to academic fatigue.
- **The Protective Role of Shared Households:** The joint family model continues to serve as an important social buffer within the regional context. Shared responsibilities and family support networks offer useful resources for reducing student burnout.



Strategic Recommendations for Teacher Education

Based on these statistical conclusions, the following structural enhancements are proposed for the teacher training infrastructure in Gujarat:

Optimizing the B.Ed. Practicum Schedule: Academic institutions and apex regulatory bodies should look to distribute intense teaching blocks more evenly. Spacing out internships, action research projects, and final viva-voce examinations across the semester can help prevent high clusters of student stress.

Establishing Campus Wellness Centers: Teacher training institutions, across both the public sector (such as IITE) and self-financed colleges (such as Shakti B.Ed.), should maintain active, private counseling spaces. Providing flexible scheduling options can help support married trainees who face balancing domestic roles with professional expectations.

Integrating Life-Skills into Core Curricula: In accordance with the holistic focus of current national educational policies, experiential practices such as mindfulness, stress-management techniques, and emotional literacy modules should be embedded as credit-linked elements within the core B.Ed. curriculum rather than being treated as optional seminars.

VI. Conclusion

This comparative study of the psychological wellness architectures and socio-educational adaptability of pre-service teachers enrolled in two teacher training models in Gujarat highlights the critical role that teacher education programs play in shaping both personal well-being and professional readiness. The findings indicate that psychological wellness and socio-educational adaptability are essential attributes that enable future teachers to cope effectively with academic demands, classroom challenges, institutional expectations, and the diverse needs of learners.

The comparative analysis suggests that while both training models contribute to the development of these competencies, differences may exist in the extent to which they foster emotional resilience, self-awareness, social competence, adaptability, and professional confidence. Such variations emphasize the importance of integrating structured mental health support, reflective practices, experiential learning, and collaborative activities within teacher education curricula.

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