

Even or Uneven Academic Stress? Demographic Variations among Pre-Service Teachers**Brijesh Kumar Singh¹ & Dr. Pushpa Devi²**DOI: <https://doi.org/10.5281/zenodo.19104399>**Review: 04/02/2026****Acceptance: 04/02/2026****Publication:18/03/2026****Abstract**

This study examines pre-service teachers' academic stress in relation to selected demographic variables, such as locality and marital status. A descriptive survey method was used to collect relevant information from pre-service teachers (who are enrolled in D.El.Ed. and B.Ed. courses). A sample of 271 students from various public and private institutions in Varanasi (Kashi), Uttar Pradesh (UP), was collected through a stratified random selection method. Data from respondents was collected using the researcher-developed Academic Stress Scale (for pre-service teachers). The results showed that locality and marital status did not significantly affect the academic stress of pre-service teachers. Thus, it is inferred that academic stress among pre-service teachers is mainly related to the academic structure and demands of the teacher training programme rather than demographic factors such as residential background or marital status. Henceforth, it is recommended that teacher training institutions organise inclusive curricular programmes so that all students can manage their academic responsibilities more efficiently.

Keywords: Locality, Marital Status, Academic Stress, Pre-service teachers**Introduction**

Academic stress among students has long been studied, and researchers have identified stressors such as excessive assignments, peer competition, failures, and poor relationships with peers or lecturers (Fairbrother & Warn, 2003). Students perceive that the root cause of their academic stress is the lack of sufficient time to assimilate a vast amount of factual information. Prabu (2015) reported that students experience study-related stress for a certain duration during every semester examination. The primary sources of this stress include preparing for exams, completing them within the allotted time, and the competitive race among students regarding grades. When this stress becomes excessive, it exerts a negative influence on students, causing them mental and physical harm and methods used to reduce stress often include effective time management, social support, positive reappraisal, and engagement in leisure pursuits (Prabu, 2015).

The pressure to perform well on examinations or tests, along with the time allocated, makes the academic environment very stressful (Erkutlu & Chafra, 2006). This is likely to affect social relations both within and outside the institution, which in turn affects the person's commitment to achieving goals (Fairbrother & Warn, 2003). The pressure and anxiety arising from schoolwork are collectively referred to as academic stress. Specifically, students constantly face pressure stemming from the fear of disappointing their families and society to secure high marks in semester or annual examinations. When a child attends school, stress related to study can manifest in various aspects of their life, whether at home, in their friendships, in social settings, at school, or in sports activities. A student's stress levels tend to escalate when they are unable to balance their social and academic

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spheres and when they fail to manage their time effectively to accommodate school-related extracurricular activities. School activities such as speech, dance, music, quizzes, debates, and arts help improve students' performance and reduce stress. Among secondary school students, the primary sources of stress are the pressure to achieve good grades, academic workload, frequent testing, family expectations, and the demand for success (Kumari & Singh, 2022).

Furthermore, Kalita & Samiran (2024) categorised four major categories: eustress, hypo stress, hyper stress, and distress based on the levels of effect on individuals. Whereas stress among students can stem from both positive and negative sources, academic pressure, dating, the educational environment, extracurricular activities, peer relationships, and parental expectations are often the primary sources of stress. In an alphabetically ordered list of the causes of stress among students, academic pressure ranks as the foremost factor. Stress management strategies may prove essential for completing academic projects that are becoming progressively more challenging. By assigning essays on topics such as "Causes of Stress Among Students," educators can adopt an effective approach to familiarize students with the nature of this stress. Furthermore, if students are encouraged to interview their teachers and senior peers and to conduct online research on the subject, they may become better equipped to cope with the pressures associated with academic challenges (Dixit & Neeta, 2017). At the level of higher education, students encounter numerous academic, social, and psychological challenges, which consequently give rise to academic stress. Study-related stress is a psychological state that arises when students perceive themselves as under pressure or feel unable to fulfil their academic tasks, expectations, and responsibilities.

Academic stress is a significant issue, particularly for students in teacher-training programs, as the quality of their training directly affects their future professional performance and the development of their own students. Therefore, it is imperative to develop effective strategies within teacher-training programs to address and mitigate the academic stress experienced by students (Martínez et al. 2021). Keeping this context in mind, the investigator was prompted to investigate academic stress among pre-service teachers (B.Ed. and D.El.Ed. students) in relation to demographic factors such as residential background or marital status.

Review of Related Literature

According to Lie & Larson (2000), "Literature review is a provocative and potent evaluation of documents on particular research topics. Reviewing is an integral part of the research process, and sometimes it constitutes the whole research project."

Researches (Prabhu, 2015; Dixit & Neeta, 2017; Sagar & Singh, 2017; Punia & Devi, 2018; Gayen & Lakhotia, 2021; Shakeela, 2023; Meenatchi et al., 2025) indicated that locale and marital status significantly affects stress among students, but results were in various directions such as Prabhu (2015) found that higher secondary students from urban areas are more stressed about their studies than students from rural areas. Dixit and Neeta (2017) found that metropolitan students pursuing a Diploma in Elementary Education experienced greater academic stress than those in rural areas. In contrast, Sagar & Singh (2017) reported no significant difference in study stress between higher secondary school students from rural and urban areas. In this line, Punia and Devi (2018) reported in their study that locale significantly affects the perception of stress among pupil teachers, and that rural-locale teachers have higher stress than urban-locale teachers. In the context of marital status, Gayen and Lakhotia (2021)

found no significant difference in work-related stress levels between married and unmarried men, and that the average for unmarried men was higher than that for married men. Shakeela (2023) found that urban students reported higher levels of academic stress than rural students, and there was no significant difference in academic stress between married and unmarried interns. Similarly, Meenatchi et al. (2025) found that rural students experience more exam stress than urban students.

Regarding the aforementioned studies, the literature review indicates that the results are both conflicting and contradictory. Additionally, very few Indian researchers have examined these ideas collectively, indicating a research gap that needs to be addressed through further research. These factors motivated the researcher to examine academic stress in relation to Pre-service teachers' locale and marital status.

Research Gap

This study addresses a major gap in the existing literature by examining academic stress in the context of location and marital status. It is essential to rectify the deficiencies identified through this research. Therefore, the study linking academic stress to locality and marital status among pre-service teachers will benefit from understanding the factors of academic stress, as will pre-service institutions, which will help shape the future of pre-service teachers. The main focus question of the study is as follows:

- Whether academic stress differs significantly with regard to locality.
- Whether academic stress differs significantly with regard to marital status.

Objectives

1. To compare the mean scores of academic stress among pre-service teachers belonging to rural and urban areas.
2. To compare the mean scores of academic stress among unmarried and married pre-service teachers.

Hypotheses

The literature indicates that the results are both conflicting and contradictory. Therefore, to determine the difference in the educational stress of prospective teachers based on locality and marital status, the following null hypothesis was formulated:

- **H₀₁** There is no significant difference in the mean score of academic stress of rural and urban pre-service teachers.
- **H₀₂** There is no significant difference in the mean score of academic stress of unmarried and married pre-service teachers.

Methodology

A quantitative research approach was used in the current study, employing a descriptive survey method. 271 respondents from government and private institutions located in Varanasi, Uttar Pradesh, were collected using the stratified random sampling method. Relevant quantitative data were collected using the 'Academic Stress Scale' (for pre-service teachers), developed by the researcher, and appropriate descriptive and inferential statistics were applied.

Data Analysis and Interpretation

Before proceeding with statistical techniques, it was checked whether the data met the assumption of normality. The ‘Normal Probability Curve (NPC)’, ‘Quartile-Quartile (Q-Q) plot’, ‘skewness (Sk)’, ‘kurtosis (Ku)’, and Z-values were among the techniques used to confirm the data distribution. The fact that the mean, median, and mode all have the same value at the distribution's centre is a crucial feature of a normal distribution (Garrett, 2009). According to Ghasemi & Zahediasl (2012), the acceptable Z-value range for determining normality is between -2.58 and +2.58, while Doane & Seward (2011) suggest a stricter range of -1.96 to +1.96 in a normal distribution. The Z-values in the tables below fall within these acceptable limits, confirming that the data for all variables meet the criteria for normality.

Table 1.1 Descriptive statistics for the Normal Distribution of Academic Stress of Pre-service Teachers

N	Mean	SD	Std. Error Mean	Sk	Std Error Sk	Z Value of Sk	Ku	Std Error Ku	Z value of Ku
271	137	27.2	1.65	0.266	0.148	1.79	0.460	0.295	1.56

Table 1.1 presents the standard error of the mean (1.65), which indicates that the sample mean of 137 deviates by 1.65 with respect to the average score of the population. This indicates a sample mean that is reasonably very close to the population mean. The value of z of skewness and kurtosis of ‘pre-service teachers’ academic stress score (1.79 and 1.56) suggests Z-values for skewness and kurtosis lie within the range -1.96 to +1.96, considering the normal distribution of data at 5% significance level. Observation of Table 1.1, figures 1.1A & 1.1B lead to the conclusion that the scores of academic stress of pre-service teachers are distributed normally.

Figure 1.1A: NPC showing Academic Stress scores of D.El.Ed. students (N=271)

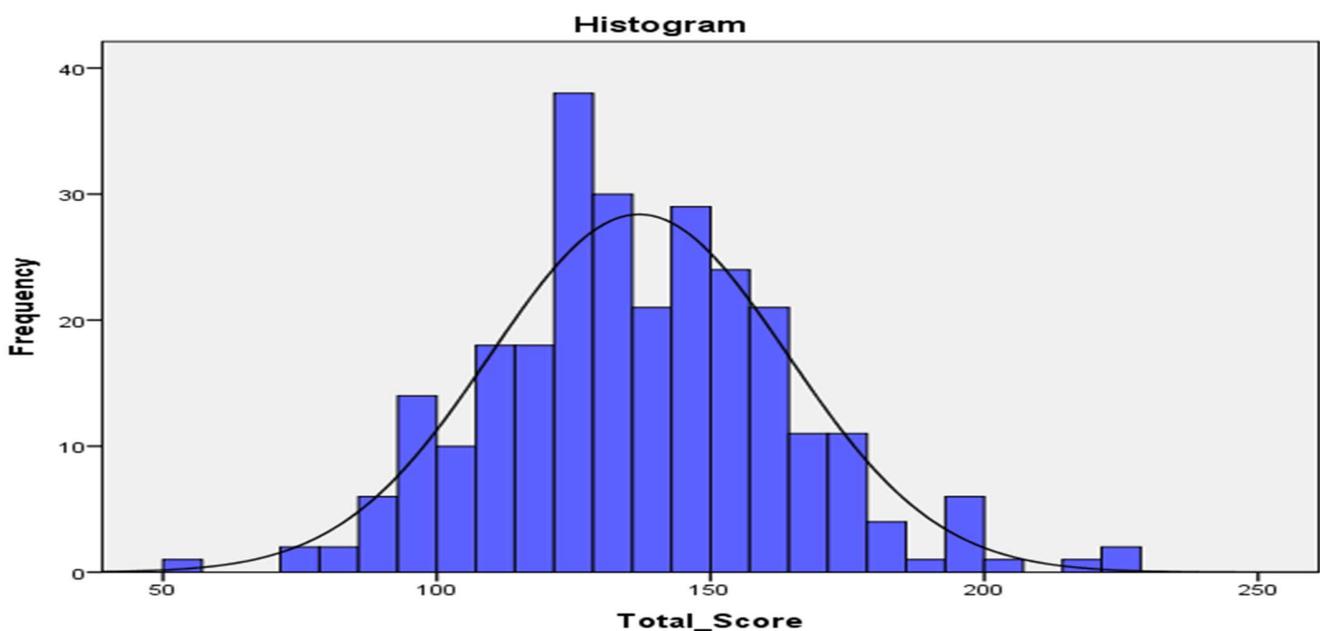


Figure 1.1B: Q-Q plot showing Academic Stress scores of D.El.Ed. Students (N=271)

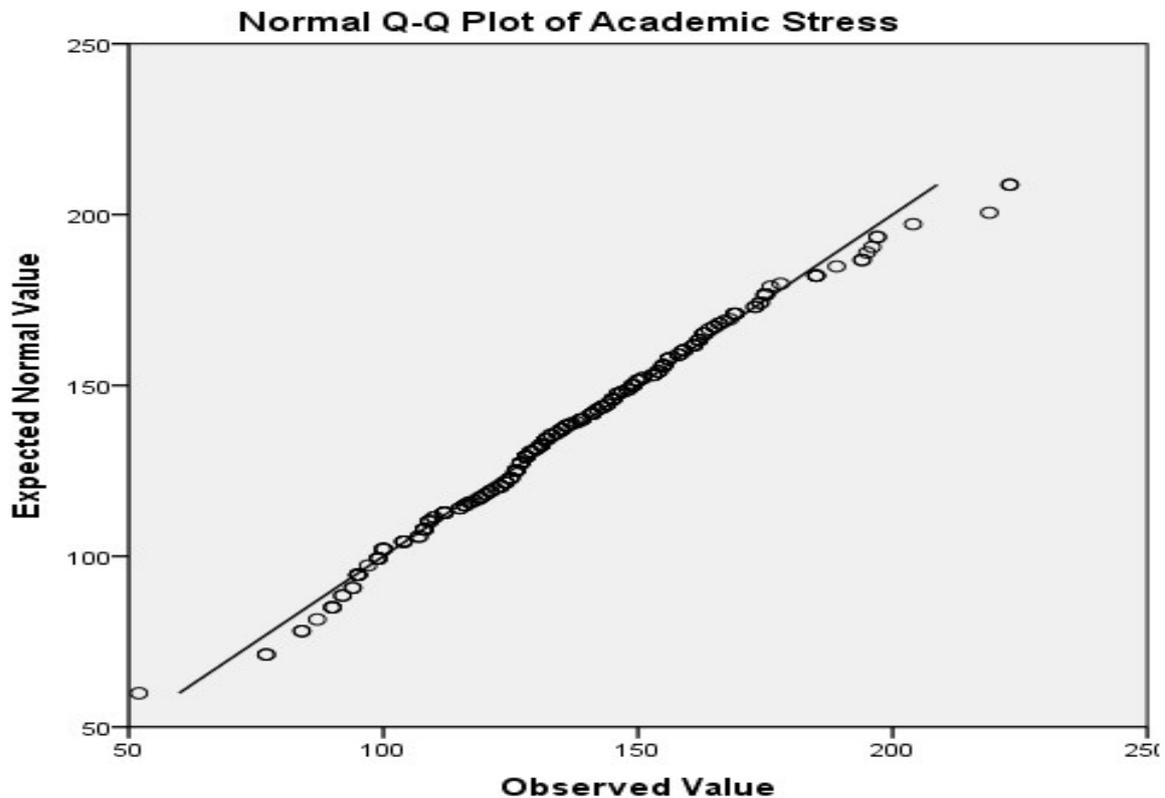


Table 1.2: “Kolmogorov-Smirnov” and “Shapiro-Wilk” test of Normality to test the significance of the Normal Distribution of Academic Stress Scores of Pre-service teachers

Total Score (Academic Stress)	Tests of Normality					
	“Kolmogorov-Smirnova”			“Shapiro-Wilk”		
	Statistic	Df	Sig.	Statistic	Df	Sig.
	0.048	271	0.200*	0.991	271	0.085

Table 1.2: shows the significance values for the ‘Kolmogorov-Smirnov’ (0.200) and ‘Shapiro-Wilk’ (0.085) tests. The data on academic stress scores can be considered normally distributed, as these values exceed 0.05 ($p > 0.05$). This confirms that parametric statistical tests can be appropriately utilized in further analyses.

Objective 1

- 1.To compare the mean scores of academic stress among pre-service teachers belonging to rural and urban areas.
- 2.To achieve the above objective, the null hypothesis was tested by employing an independent t-test, and the results are shown in Table 1.3

Table 1.3. Locale-wise comparison of Academic Stress Scores of Pre-Service Teachers

Variable	Group	N	Mean	SD	SEM	df	T	Sig. (2-tailed)	95% Confidence Interval of the Difference	
									Lower	Upper
Total Academic stress Score	Rural	125	140.05	26.28	2.36	269	1.734	.084	Lower	Upper
	Urban	146	134.32	27.758	2.289				-0.776	12.233

*Not significant at the 0.05 level of significance

Table 1.3 presents the mean Academic Stress scores for rural (140.05) and urban (134.32), with standard deviations of 26.28 and 27.758, respectively, which are extremely similar, indicating that the two groups do not differ significantly. Academic stress did not show a significant difference between the two groups, according to the data ($t(269) = 1.734$, p -value (Sig. 2-tailed) = 0.084). There is no difference between the two groups' academic stress scores, according to the p -value ($0.084 > 0.05$).

Therefore, the null hypothesis "There is no significant difference in the mean score of academic stress of rural and urban pre-service teachers" is accepted. The fact that zero is included in the confidence interval (-0.776 to 12.233) further supports the premise that the difference is not significant. 'There is no significant difference in the mean score of academic stress of rural and urban pre-service teachers' is accepted.

Objective 2

1. To compare the mean scores of academic stress among unmarried and married pre-service teachers.
2. To achieve the above objective, the null hypothesis was tested by employing an independent t-test, and the results are shown in Table 1.4

Table 1.4: Marital-Status-wise comparison of Academic Stress Scores of Pre-Service Teachers

Variable	Group	N	Mean	SD	SEM	df	T	Sig.(2-tailed)	95% Confidence Interval of the Difference	
									Lower	Upper
Total Academic Stress Score	Un-married	233	136.35	27.555	1.801	269	-0.905	0.366	Lower	Upper
	Married	38	140.70	24.826	4.081				-13.833	5.120

*Not significant at the 0.05 level of significance

Table 1.4 presents the mean academic stress scores for unmarried (136.35) and married (140.70), The unmarried group's standard deviation is 27.555, while the married group's is 24.826. These values are extremely similar, indicating that there isn't much of a difference between the two groups. The findings show that there is no discernible difference between the two groups' academic stress levels ($t(269) = -0.905$, p -value (Sig. 2-tailed) = 0.366). The p -value $0.366 > 0.05$, indicating no difference in academic stress scores between the two groups.

Therefore, the null hypothesis “There is no significant difference in the mean score of academic stress of unmarried and married pre-service teachers” is accepted. The fact that zero is included in the confidence interval (-13.833 to 5.120) further supports the premise that the difference is not significant, i.e. ‘There is no significant difference in the mean score of academic stress of unmarried and married pre-service teachers’ is accepted.

Findings

1. According to the data interpretations, the study revealed no statistically significant variation in pre-service teachers’ levels of academic stress by locality. This suggests that the degree of academic stress that pre-service teachers experience is independent of their locality. In this context, students’ mental health seems to be unaffected by their location, indicating that both urban and rural students face academic stress from comparable or equally accessible sources and experiences within the academic environment.
2. The findings predict that no remarkable difference exists in the academic stress between unmarried and married students enrolled in pre-service teacher programs. This suggests that marital status affiliation does not influence students’ academic stress. The study discovered that married and unmarried students report comparable levels of academic stress, despite the assumed rigour or nature of a particular marital status. This suggests that all academic departments should implement unified well-being measures.

Discussion

The present studies finding is in consonance with the findings reported by Sagar & Singh (2017), who revealed that there is no significant difference in the stress of higher secondary school students from rural and urban areas. While, results of the present study are not in alignment with the previous studies (Prabhu, 2015; Dixit & Neeta, 2017; Punia & Devi, 2018; Gayen & Lakhota, 2021; Shakeela, 2023; Meenatchi et al., 2025), which indicated that locale and marital status affects stress among students but the current study found no significant difference in the academic stress between rural and urban pre-service teachers, indicating that both groups experience a similar level of stress during teacher training. Likewise, no remarkable difference was reported between married and unmarried students, suggesting that marital status does not significantly influence academic stress. Possible reasons for these findings include the fact that people in rural areas nowadays have a similar lifestyle to urban residents, and all students are required to complete similar academic tasks, such as lesson planning, micro-teaching, internships, assignments, and examinations. These common academic requirements create similar pressures for all trainees. Therefore, the stress related to the academic environment among pre-service teachers is mainly influenced by workload, performance expectations, and training demands rather than background factors like residence or marital status. Due to these possible reasons above findings have been observed.

Conclusion

The study’s conclusions indicate that pre-service teachers in rural and urban areas do not significantly differ in their levels of academic stress. Both groups of students experience similar levels of academic stress due to the uniform nature of the teacher education curriculum and training requirements. Similarly, the study also concludes that marital status does not significantly affect the academic stress of pre-service teachers, as no significant difference was found between married and unmarried students. Thus, it may be inferred that academic stress among pre-service teachers is mainly related to the academic structure and demands of the teacher training programme rather than demographic factors such as residential background or marital status.

Recommendations

As the results indicated that demographic factors such as locale and marital status are not associated with stress among students, it is recommended that teacher training institutions organise inclusive curricular programmes so that all students can manage their academic responsibilities more efficiently. Furthermore, teachers and teacher educators should foster a supportive, encouraging learning environment in which students feel comfortable sharing their academic concerns and challenges.

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