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# A COMPARATIVE STUDY OF FEMALE TEACHER TRAINEES PURSUING INTEGRATED COURSES IN ARTS AND SCIENCE STREAM IN RELATION TO THEIR ACADEMIC RESILIENCE AND LOCUS OF CONTROL

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## ABSTRACT

*" विद्या ददाति विनयं विनयाद्याति पात्रताम्।*
*पात्रत्वाद्धनमाप्नोति धनाद्धर्मं ततः सुखम्॥ "*

(Knowledge gives humility, humility leads to worthiness, Worthiness brings wealth, wealth fosters righteousness, and righteousness brings happiness.).

**Keywords:** Academic Resilience, Locus of Control, Female Teacher Trainees, Integrated Courses, Arts and Science Stream, Teacher Education

## 1. INTRODUCTION

Female teacher trainees play a crucial role in shaping the future of education, and their resilience and locus of control are vital for their professional success**.** The National Education Policy (NEP) 2020 highlights the importance of empowering educators to create inclusive and equitable learning environments.

Academic resilience and locus of control are crucial psychological constructs that influence students' academic success and personal growth. By addressing the unique challenges faced by female teacher trainees, this research contributes to the policy's goal of fostering well-rounded, adaptive, and confident educators. Implementing targeted interventions that consider the specific needs of Arts and Science stream trainees can enhance their professional preparedness and ensure they are equipped to navigate the evolving educational landscape effectively.

This comparative study examines female teacher trainees pursuing integrated courses in the Arts and Science streams, focusing on their academic resilience and locus of control.

### CONCEPTUAL FRAMEWORK

The ancient Gurukul system of education in India was more than just a place for acquiring knowledge—it was a transformative journey where the Guru played a central role in shaping students' intellect, character, and spiritual

wisdom. The learning experience was deeply engaging, emphasizing self-discipline, resilience, ethical principles, and emotional intelligence.

The educational journey was highly immersive, focusing on fostering self-control, perseverance, moral values, and emotional intelligence. This approach ensured that students developed into not just knowledgeable scholars, but also insightful individuals prepared to make a meaningful contribution to society.

The learning experience was deeply engaging, emphasizing self-discipline, resilience, ethical principles, and emotional intelligence. This holistic approach finds a strong resonance in the National Education Policy (NEP) 2020, which envisions educators as mentors who nurture students beyond academics, fostering self-awareness, adaptability, and ethical responsibility.

Just as the Gurukul prepared learners to navigate life's challenges with wisdom and inner strength, NEP 2020 emphasizes a multidisciplinary, value-based education that integrates cognitive progress with emotional and ethical growth. In modern teacher training, academic resilience and locus of control have emerged as crucial factors in preparing educators who can inspire, adapt, and empower future generations integrating age-old wisdom with contemporary educational advancements, India is not merely reviving its rich heritage but also shaping a future where education transcends rote memorization, evolving into a path of holistic growth and transformation.

Educators, both former and current, play a key part in this transition. They bridge the gap between traditional wisdom and modern knowledge, preparing students to navigate the complexities of the contemporary world while staying rooted in their cultural heritage. Thus, the goal of NEP 2020 is to build a more inclusive and brighter future while also honoring the rich history of India's educational system.

Recognizing the significance of these factors, this study undertakes a comparative analysis of female teacher trainees pursuing integrated courses in the Arts and Science streams. By examining their academic resilience and locus of control, the study aims to uncover potential differences and underlying influences that contribute to their learning experiences and professional outlook. Such an inquiry is consistent with current educational priorities, emphasizing the importance of teacher preparation programs in cultivating not only academic mastery but also psychological fortitude and self-regulation skills required for holistic development. This inquiry resonates with modern educational priorities, highlighting the importance of teacher training programs that focus not only on subject mastery but also on developing psychological resilience and self-regulation skills crucial for comprehensive growth. As a result, there is now more interest in comprehending the character traits—such as academic resilience and locus of control —that define successful educators.

**Academic resilience** refers to the ability to achieve strong academic performance despite challenges encountered during the educational process. It is the capacity to effectively manage academic setbacks and difficulties that are common in everyday academic life **(Martin & Marsh, 2006).** In simpler terms, it describes a student's ability to cope with academic pressures, stress, and obstacles such as low grades, exam anxiety, and challenging coursework. Overall, academic resilience is the ability of a student to sustain their academic success while navigating the difficulties of life. **Dwiastuti, I., Hendriani, W., & Andriani, F. (2022)** studied "The Impact of Academic Resilience on Academic Performance in College Students During the Covid-19 Pandemic." It was a quantitative study and ARS-30 (Indonesia version) was taken for the data collection. The descriptive statistical analysis found that the most influential risk factor was difficulties related to the academic process, namely schooling adjustment. **Foster, Tamara Andrews** (2013) Academic Resilience among North Georgia rural students living in poverty was studied, and it was discovered that connections with family, peers, and school staff, as well as family expectations, involvement in school activities, and various instructional strategies used by the school, all contribute to the students' Academic Resilience. **Meneghel, I., Martínez, I. M., Salanova, M., & Witte, H. (2019)** studied the validity of the Academic Resilience Scale (AR-S) psychometric features in the setting of Spanish universities, and that coping mechanisms are the precursors to Academic Resilience, while academic satisfaction and performance are the outcomes of Academic Resilience. The Academic Resilience Scale was shown to have strong psychometric characteristics in the Spanish setting, the function of coping techniques in Academic Resilience was found to be positive, and there was no direct association between resilience and academic satisfaction.

**Locus of control**, as proposed by **Rotter** (1966) defined locus of control as whether people think their life experiences are the consequence of external factors (external locus) or their own activities (internal locus). Effective classroom

management is possible for educators who possess a strong internal locus of control because they feel more empowered, flexible, and capable. Recent research, for instance, emphasizes how crucial these attributes are to the teaching profession: Although **Kumar et al**. (**2022)** found that instructors with an internal locus of control were more adaptable and had better problem-solving abilities, **Sharma and Verma** (**2021**) found that teachers with high spiritual intelligence were more resilient and had a stronger sense of purpose. These attributes are particularly important for female teacher candidates, who frequently have to negotiate intricate social and cultural norms. According to **Hannah Levenson (1974)**, there are three dimensions to locus of control: internality (the belief that events are self-determined), powerful others (the belief that events are controlled by influential people), and chance (the belief that events are random). Individuals with an internal locus of control believe they can influence events and outcomes through their efforts, while those with an external locus of control think they have little control over events or results. **Rani (2014)** found that an external locus of control was more prevalent among male and female secondary school teachers. However, male teachers exhibited a stronger internal locus of control, while female teachers were more affected by external factors like fear. **Inanath (2007)** discovered that females tend to exhibit a more external locus of control compared to males, and those living in rural areas are more likely to develop an external locus of control than their urban counterparts. **Mehta and Gupta (2022)** conducted a study on higher education teachers, examining the relationship between teacher effectiveness and locus of control.

While previous studies highlight the benefits of spiritual intelligence and locus of control for educators, there is a significant gap in empirical research that examines how these qualities specifically manifest in female teacher trainees. This gap raises important questions, particularly: How do levels of academic resilience and locus of control influence the experiences and effectiveness of female teacher trainees? Despite its relevance, the researcher has found no existing studies that comprehensively address this inquiry in a manner that aligns with her vision. Moreover, research that connects the NEP 2020's emphasis on the Indian Knowledge System (IKS)-aligned values—such as resilience, empathy, and integrity—with these psychological constructs in female teacher training programs remains scarce. Addressing this gap is critical, as it can offer valuable insights into developing training models that support the NEP 2020's objectives. Such models would help cultivate educators who are not only knowledgeable but also resilient, compassionate, and capable of guiding students in a well-rounded, holistic manner. This study aims to fill this research gap, contributing a new perspective on how academic resilience and locus of control can be integrated into female teacher training to foster transformative educators.

This research contributes to the growing discourse on teacher education by offering insights into how academic resilience and locus of control shape the professional preparedness of future educators. It underscores the importance of stream-specific strategies in empowering teacher trainees to navigate the challenges of the educational landscape effectively.

## 2. OBJECTIVES OF STUDY

The study evolves around the following objectives: -

1. To study the Academic resilience of the female teacher trainees pursuing integrated courses in the Arts and Science stream.
2. To study the locus of control of the female teacher trainees pursuing integrated courses in the Arts and Science.
3. To compare the Academic Resilience of the female teacher trainees pursuing integrated courses in the arts and science stream.
4. To compare the locus of control of the female teacher trainees pursuing integrated courses in the arts and science stream
5. To study the relationship between the Academic resilience and locus of control of the female teacher trainees pursuing integrated courses.

**HYPOTHESIS OF THE STUDY**

1. There is no significant difference between the academic resilience of the female teacher trainees pursuing integrated courses in the arts and science stream.
2. There is no significant difference between the locus of control of the female teacher trainees pursuing integrated courses in the arts and science stream.
3. There is no significant relationship between academic resilience and locus of control of the female teacher trainees pursuing integrated courses in the arts stream.

4. There is no significant relationship between academic resilience and locus of control of the female teacher trainees pursuing integrated courses in the science stream.
5. There is no significant relationship between academic resilience and locus of control of the female teacher trainees pursuing integrated courses.

## RESEARCH METHOD

The study was done using the descriptive survey method considering the nature of the study. The sample was collected from 70 female teacher trainees pursuing integrated B.Ed. Courses in arts and science stream from the colleges in Jaipur city only; using a random sampling method. After the scrutiny of the sample finally, 30 from each art and science stream were selected for the study. The standardized tools were used for studying academic resilience and locus of control of the students. The details of which are as follows: -

1. **Academic Resilience**- Self-constructed Academic Resilience Scale was used for the study.
2. **Locus of Control**- Levenson's Locus of Control Scale, prepared by Sanjay Vohra

For analyzing the data collected, Mean and SD were calculated, and for Inferential statistics t-test and Correlation to determine the significant relationship between groups.

## ANALYSIS AND INTERPRETATION

The analysis and interpretation of the data have been done keeping in consideration the objectives and hypotheses of the study. The investigation is conducted on the group of teacher trainees of both arts and science streams about their Spiritual intelligence and Locus Of Control. The description of the calculation and results obtained are systematically presented as follows: -

### HYPOTHESIS – 1:

**There is no significant difference in the academic resilience of female teacher trainees pursuing integrated courses in the arts and science stream.**

For testing the current hypothesis, for descriptive analysis Mean and Standard deviation are calculated; and to study the significance of the difference between arts and science stream students in relation to their level of spiritual intelligence, the Critical Ratio is calculated.

***Table- 1. Mean, S.D., and Critical Ratio of the scores of Arts and Science female teacher trainees for Academic Resilience***

| | | | | |
|---|---|---|---|---|
| **ARTS** | 196.97 | 3.48 | 10.98 | **Significant at 0.01 level** |
| **SCIENCE** | 204 | 8.83 | | |

* ***df =29, table value 2.576 at 0.01 level of significance***

**Table 1** depicts the Mean, S.D., and Critical Ratio of the scores of the level of academic resilience of the female teacher trainees pursuing integrated courses in the arts and science stream. The table shows the Mean and S.D. of the scores of the level of academic resilience for the Arts stream, which is 196.97 and 33.48, and the same for the Science stream students 204 and 88.83 respectively. The Critical Ratio value of the data is calculated as 10.98, which is greater than the table value at the 0.01 level of significance 2.576.

Therefore, there is a significant difference between the level of academic resilience of the female teacher trainees of the arts and science stream. Hence, the hypothesis is **not accepted**.

### HYPOTHESIS – 2:

**There is no significant difference in the locus of control of female teacher trainees pursuing integrated courses in the arts and science stream.**

For testing the current hypothesis, for descriptive analysis Mean and Standard deviation are calculated; and to study the significance of the difference between arts and science stream students in relation to their level of locus of control, the Critical Ratio is calculated.

***Table-2. Mean, S.D., and Critical Ratio of the scores of Arts and Science female teacher trainees for Locus of Control***

| | | | | |
|---|---|---|---|---|
| **ARTS** | **88.3** | **27.94** | **6.88** | |
| **SCIENCE** | **97.6** | **26.94** | | **Significant at 0.01 level** |

* ***df =29, table value 2.576 at 0.01 level of significance***

**Table 2** depicts the Mean, S.D., and Critical Ratio of the scores of the level of locus of control of the female teacher trainees pursuing integrated courses in the arts and science stream. The table shows the Mean and S.D. of the scores of the level of locus of control for the Arts stream, which is 88.3 and 27.94, and the same for the Science stream students 97.6 and 26.94 respectively. The Critical Ratio value of the data is calculated as 10.98, which is greater than the table value at the 0.01 level of significance 6.88.
Therefore, there is a significant difference between the level of locus of control of the female teacher trainees of the arts and science stream. Hence, the hypothesis is **not accepted**.

**HYPOTHESIS –3:**
**There is no significant relationship between academic resilience and locus of control of the female teacher trainees pursuing integrated courses in the arts stream.**

To test the above hypothesis the Product Moment Coefficient of Correlation was calculated between the academic resilience and locus of control of female teacher trainees of the arts stream. The obtained r-value after applying the statistical formula is shown in the following table: -

***Table- 3 Correlation Coefficient Between the Scores of Academic Resilience And Locus of Control***

| | | | |
|---|---|---|---|
| **ACADEMIC RESILIENCE** | **30** | **0.043** | **Insignificant at 0.01 level of significance** |
| **LOCUS OF CONTROL** | **30** | | |

* ***df =28, table value 0.463 at 0.01 level of significance***

**Table 3** shows that the calculated correlation coefficient value between the Academic Resilience and the Locus of Control of female teacher trainees of the arts stream (N=30) is 0.043. The result shows an insignificant positive relationship between the Academic Resilience and the Locus of Control of female teacher trainees of the arts stream; as the calculated value of 0.043 is less than the tabulated value of 0.463 at *df* 28 at 0.01 level of significance. This depicts that the changes in one variable insignificantly affect the other variable. Thus, there is an insignificant positive relationship between the Academic Resilience and the Locus of Control of female teacher trainees of the arts stream. Hence the hypothesis is **accepted**.

**HYPOTHESIS –4:**
**There is no significant relationship between academic resilience and locus of control of the female teacher trainees pursuing integrated courses in the science stream.**

To test the above hypothesis the Product Moment Coefficient of Correlation was calculated between the academic resilience and locus of control of female teacher trainees of the science stream. The obtained r-value after applying the statistical formula is shown in the following table: -

***Table- 4 Correlation Coefficient Between the Scores of Academic Resilience And Locus of Control***

| | | | |
|---|---|---|---|
| **ACADEMIC RESILIENCE** | **30** | **-0.3332** | **Insignificant at 0.01 level of significance** |
| **LOCUS OF CONTROL** | **30** | | |

* ***df =28, table value 0.463 at 0.01 level of significance***

**Table 4** shows that the calculated correlation coefficient value between the Academic Resilience and the Locus of Control of female teacher trainees of the arts stream (N=30) is **-0.3332**. The result shows an insignificant negative relationship between the Academic Resilience and the Locus of Control of female teacher trainees of the arts stream; as the calculated value **-0.3332 is** less than the tabulated value of 0.463 at *df* 28 at 0.01 level of significance. This depicts that the changes in one variable insignificantly affect the other variable. Thus, there is an insignificant negative relationship between the Academic Resilience and the Locus of Control of female teacher trainees of the science stream. Hence the hypothesis is **accepted**.

**HYPOTHESIS –5:**

**There is no significant relationship between academic resilience and locus of control of the female teacher trainees pursuing integrated courses.**

To test the above hypothesis the Product Moment Coefficient of Correlation was calculated between the academic resilience and locus of control of female teacher trainees pursuing integrated courses. The obtained r-value after applying the statistical formula is shown in the following table: -

***Table- 5 Correlation Coefficient Between the Scores of Academic Resilience And Locus of Control***

| | | | |
|---|---|---|---|
| **ACADEMIC RESILIENCE** | **60** | **-0.5969** | **Significant at 0.01 level of significance** |
| **LOCUS OF CONTROL** | **60** | | |

* ***df =58, table value 0.325 at 0.01 level of significance***

**Table 5** shows that the calculated correlation coefficient value between the Academic Resilience and the Locus of Control of female teacher trainees pursuing integrated courses (N=60) is -0.5969. The result shows a significant negative relationship between the Academic Resilience and the Locus of Control of female teacher trainees pursuing integrated courses; as the calculated value -0.5969 is more than the tabulated value of 0.325 at *df* 58 at 0.01 level of significance. This depicts that the changes in one variable significantly affect the other variable. Thus, there is a significant negative relationship between Academic Resilience and the Locus of Control of female teacher trainees pursuing integrated courses. Hence the hypothesis is **not accepted**.

**FINDINGS**

After the analysis of the data following facts were found: -

1) The difference between the Academic Resilience of arts and science stream students was found to be significant.
2) The difference between the Locus of Control of arts and science stream students was found to be significant.

3) There was a positive insignificant correlation between the Academic Resilience and Locus of Control of the female teacher trainees of the arts stream. This implies that the effect of Academic Resilience on the Locus of Control of the students is positive and, in our case, insignificant.
4) There was a negative insignificant correlation between the Academic Resilience and Locus of Control of the female teacher trainees of the science stream. This implies that the effect of Academic Resilience on the Locus of Control of the students is negative and, in our case, insignificant.
5) There was a negative significant correlation between the Academic Resilience and Locus of Control of the female teacher trainees of both arts and science stream. This implies that the effect of Academic Resilience on the Locus of Control of the students is negative and, in our case, significant.

**IMPLICATIONS OF THE STUDY**

After a thorough study of the findings, the researcher is now in the position to state some implications for the same: -

1. The significant difference in Academic Resilience and Locus of Control between arts and science stream students suggests that the nature of academic disciplines may influence students' ability to cope with challenges and their perceived control over outcomes. This finding highlights the need for tailored psychological and educational interventions to strengthen resilience and foster a balanced sense of control in students of both streams.
2. The positive yet insignificant correlation between Academic Resilience and Locus of Control in female teacher trainees of the arts stream indicates that while greater resilience may contribute to a stronger internal locus of control, the relationship is weak in this context. This suggests that other factors, such as personal motivation, sociocultural influences, or institutional support, may play a crucial role in shaping students' perceptions of control.
3. The negative but insignificant correlation between Academic Resilience and Locus of Control in female teacher trainees of the science stream implies that as resilience increases, the sense of personal control slightly decreases. This could indicate that highly resilient science students may rely more on external factors such as structured learning environments or peer support, rather than solely on personal agency. However, the insignificance of the correlation suggests that this trend is not strong enough to draw definitive conclusions.
4. The negative significant correlation between Academic Resilience and Locus of Control among female teacher trainees from both streams suggests that as students become more resilient, they tend to attribute outcomes to external factors rather than internal control. This could indicate a coping mechanism where students develop resilience by adapting to circumstances beyond their control rather than striving for complete mastery over their academic experiences.
5. The differences between streams suggest that resilience-building programs should be customized based on the specific challenges faced by arts and science students. Science students may benefit from strategies that enhance internal control, while arts students may need support in strengthening resilience through structured coping mechanisms.
6. The observed negative correlation in the combined sample suggests a need for counseling programs that address both resilience and control beliefs. Interventions should focus on helping students develop a balanced sense of control while maintaining resilience.
7. Since the study focuses on female teacher trainees, teacher education programs should incorporate training on how resilience and locus of control impact teaching effectiveness. Future educators should be equipped to foster resilience and a healthy sense of control in their students.
8. The findings indicate that additional research is needed to explore the underlying factors influencing the relationship between resilience and locus of control. Future studies could examine the role of socioeconomic background, teaching methodologies, and cultural influences in shaping these psychological attributes.

## 3. CONCLUSION

The study reveals significant differences in Academic Resilience and Locus of Control between arts and science stream students, highlighting the influence of academic discipline on psychological traits. While the relationship between these factors varies across groups, the findings suggest that resilience does not always correspond to a strong internal locus of control, particularly among science students. The significant negative correlation in the combined sample indicates that as students become more resilient, they may increasingly attribute their outcomes to external factors rather than personal control.

These findings carry important implications for educators, policymakers, and teacher training programs. Implementing targeted interventions to strengthen both resilience and a balanced sense of control can better equip students to manage academic challenges. Further research is needed to explore the underlying factors shaping these psychological attributes, enabling the development of more comprehensive support systems. By fostering resilience alongside a healthy perception of control, educators can enhance students' academic success and personal growth.

## REFERENCES

241203, DOI: 10.25215/1203.188 https://www.ijip.in

Arsini, Y., & Rusmana, N. (2023). The role of locus of control and resilience in student academic achievement. *International Journal of Learning, Teaching and Educational Research*, *22*(3), 396-412.

Bala, P., & Verma, R. (2019). Academic Resilience in Relation to Educational Aspirations among International Students. *Indian Journal of Public Health Research & Development*, *10*(6), 1591.

Cassidy, S. (2015). Resilience Building in Students: The Role of Academic Self-Efficacy. *Frontiers in Psychology*, *6*.

Dhami, M., Sharma, S., & Kang, T. K. (2024). A study of spiritual intelligence and its relationship with locus of control among youth.

Dwiastuti, I., Hendriani, W., & Andriani, F. (2022). The Impact of Academic Resilience on Academic Performance in College Students During the Covid-19 Pandemic. *KnE Social Sciences*.

Foster, T.A. (2013). *An Exploration of Academic Resilience Among Rural Students Living in Poverty,* Piedmont College Proquest Dissertation Publishing, 2013. 3560885

Gizir, C. A., & Aydin, G. (2009). Protective Factors Contributing to the Academic Resilience of Students Living in Poverty in Turkey. *Professional School Counseling*, *13*(1), 2156759X0901300.

Hosseinbor, M., Jadgal, M. S., & Kordsalarzehi, F. (2023). Relationship between spiritual well-being and spiritual intelligence with mental health in students. *International Journal of Adolescent Medicine and Health*, *35*(2), 197-201.http://www.ripublication.com/ijepa.htm

Kelley-Warner, E. S. (2023). *Exploring the Relationship Between Locus of Control, God-Attachment, Religious Commitment, Age, Gender, and Spiritual Bypass in Christian Adults* (Doctoral dissertation, Neumann University).

Martin, A. J., & Marsh, H. W. (2006). Academic resilience and its psychological and educational correlates: A construct validity approach. *Psychology in the Schools*, *43*(3), 267–281.

Martin, A. J., & Marsh, H. W. (2009). Academic resilience and academic buoyancy: multidimensional and hierarchical conceptual framing of causes, correlates and cognate constructs. *Oxford Review of Education*, *35*(3), 353–370. https://doi.org/10.1080/03054980902934639

Rahmayanti, D. (2023). The Effect of Internal Locus of Control and Spiritual Intelligence on Personal Financial Management Behavior. *Integrated Journal of Business and Economics*, *7*(1), 340.

Sharma, S. (2024). Relationship between Locus of Control, Resilience and Psychological Empowerment among Corporate Employees in the Private Sector. International Journal of Indian Psychology, 12(3), 1905-1924.

Singh, B. P. (2011). Study and Analysis of Academic Stress of B.Ed. Students. *International Journal of Educational Planning & Administration. ISSN 2249–3093*, *Volume 1*(Number 2), 119–127.

Tyler, N., Heffernan, R., & Fortune, C.-A. (2020). Reorienting Locus of Control in Individuals Who Have Offended Through Strengths-Based Interventions: Personal Agency and the Good Lives Model. *Frontiers in Psychology, 11*, 553240. https://doi.org/10.3389/fpsyg.2020.553240.

https://doi.org/10.1002/pits.20149

https://doi.org/10.1177/2156759x0901300103

https://doi.org/10.3389/fpsyg.2015.01781

https://doi.org/10.5958/0976-5506.2019.01523.7

https://knepublishing.com/index.php/KnE-Social/article/view/10198