

Financial Burden and Its Effect on Academic Performance of Students

Dr. Jyoti Harchekar*

Tilak Maharashtra Vidyapeeth, Pune, India

Abstract: Financial challenges have emerged as a significant concern for students, influencing not only their personal well-being but also their academic outcomes. This study explores the relationship between financial burden and academic performance by examining different levels of financial stress experienced by students and how these pressures affect their studies. The analysis reveals that students are spread across various stress categories, ranging from those who rarely experience financial strain to those who face it frequently or continuously. A notable proportion of students fall into the higher stress categories, indicating that financial pressure is a common and persistent issue.

Furthermore, the findings suggest that financial difficulties have a noticeable impact on academic performance. Most respondents reported that their studies are affected at a moderate to significant level, highlighting issues such as reduced concentration, increased anxiety, and difficulty in managing academic responsibilities. Only a small percentage of students indicated that financial stress has no impact on their performance. These observations emphasize the importance of understanding and addressing financial challenges as a factor influencing student success in educational settings.

Keywords: Financial Burden, Academic Performance, Financial Stress, Student Well-being, Higher Education, Chi-Square Test, Stress Impact, Educational Outcomes

INTRODUCTION

In recent years, the rising cost of education and living expenses has made financial management a critical concern for students. Many students, particularly those pursuing higher education, face challenges such as tuition fees, accommodation costs, transportation expenses, and daily living requirements. These financial pressures often compel students to depend on family support, scholarships, loans, or part-time employment, which may create additional stress and uncertainty in their academic journey.

Financial burden is not limited to the inability to meet expenses; it also includes the psychological strain associated with managing limited resources. This stress can affect students' mental well-being, leading to anxiety, distraction, and reduced focus on academic tasks. As a result, students experiencing financial difficulties may struggle to maintain consistent academic performance, participate actively in learning activities, or achieve their educational goals.

Academic performance is influenced by multiple factors, including personal, social, and economic conditions. Among these, financial stress has gained increasing attention as a potential factor affecting students' learning outcomes. Students under financial pressure may face time constraints due to part-time work, lack of access to learning resources, and emotional stress, all of which can hinder their academic progress. At the same time, some students may develop resilience and coping strategies, making the relationship between financial burden and academic performance complex and worth examining.

This study aims to analyze the extent to which financial burden affects students' academic performance by assessing their levels of financial stress and the perceived impact on their studies. Through statistical analysis, including cross-tabulation and the Chi-square test, the research seeks to identify whether a significant relationship exists between these variables. Understanding this relationship is important for educators, institutions, and policymakers, as it can help in designing support systems such as financial aid programs, counseling services, and academic assistance to improve student outcomes.

Overall, the study contributes to a better understanding of how financial challenges shape students' academic experiences and highlights the need for effective measures to reduce financial stress and promote academic success.

OBJECTIVES OF THE STUDY

1. To examine the level of financial burden experienced by students.
2. To identify different levels of financial stress among students (Never, Sometimes, Often, Always).
3. To analyze the impact of financial stress on students' academic performance.
4. To study the relationship between financial burden and academic performance.
5. To evaluate whether financial stress significantly affects academic outcomes using statistical tools such as the Chi-square test.
6. To understand students' perception regarding how financial difficulties influence their studies.
7. To provide suggestions for reducing financial stress and improving academic performance.

LIMITATIONS OF THE STUDY

1. **Limited Sample Size:** The study is based on a relatively small number of respondents, which may not fully represent the entire student population.
2. **Geographical Constraint:** The data is collected from a specific area or institution, limiting the generalizability of the findings to other regions or universities.
3. **Self-Reported Data:** The study relies on students' responses, which may be influenced by personal bias, perception, or unwillingness to disclose accurate financial conditions.
4. **Time Constraint:** The research is conducted within a limited time period, which may not capture long-term effects of financial stress on academic performance.
5. **Limited Variables Considered:** The study focuses mainly on financial burden and academic performance, while other influencing factors such as family background, mental health, and study habits are not deeply analyzed.
6. **Static Data Analysis:** The research uses cross-sectional data, which reflects only a particular point in time and does not show changes over time.
7. **Statistical Limitation:** The use of the Chi-square test alone may not fully capture the complexity of the relationship between financial stress and academic performance.

HYPOTHESIS

- **H0 (Null Hypothesis):** Financial burden has no significant effect on academic performance
- **H1 (Alternative Hypothesis):** Financial burden significantly affects academic performance

LITERATURE REVIEW

financial stress has emerged as a significant determinant of students' academic performance, particularly in higher education contexts characterized by rising educational and living costs. Existing literature consistently highlights that financial burden not only affects students' economic stability but also influences their psychological well-being and academic engagement (Robotham, 2008; Richardson, Elliott, & Roberts, 2013).

Studies have demonstrated that financial stress is positively associated with anxiety, depression, and reduced cognitive functioning, which in turn negatively impacts academic performance. For instance, Richardson et al. (2013) found that students experiencing higher financial stress reported lower academic achievement and increased psychological distress. Similarly, Robotham (2008) emphasized that financial pressures can impair concentration and motivation, leading to suboptimal academic outcomes.

From a behavioral perspective, financial constraints often compel students to engage in part-time employment. While some researchers argue that moderate work can enhance time management and responsibility (Nonis & Hudson, 2010), others highlight that excessive working hours significantly reduce study time and academic focus (Callender, 2008). This dual perspective indicates that the relationship between financial burden and academic performance is complex and mediated by individual coping mechanisms.

Another critical dimension explored in the literature is access to academic resources. Students from financially constrained backgrounds frequently face limitations in accessing technology, study materials, and academic support services (Goldrick-Rab, Richardson, & Hernandez, 2017). Such disparities create structural inequalities that can hinder academic achievement and long-term educational outcomes.

Empirical research using statistical tools, including correlation and Chi-square tests, has provided evidence of a significant association between financial stress and academic performance. These studies suggest that students in higher financial stress categories are more likely to report moderate to severe impacts on their academic performance (Joo, Durband, & Grable, 2008). However, the magnitude of this relationship varies across contexts, indicating the influence of moderating variables such as institutional support and socio-economic background.

Critically, much of the existing research focuses on generalized student populations, with limited emphasis on contextual variations such as regional, institutional, or program-specific differences. Furthermore, while many studies establish a relationship between financial stress and academic outcomes, fewer studies explore the degree of impact across different stress levels, which creates a gap in understanding nuanced student experiences.

The present study addresses this gap by categorizing students based on levels of financial stress and examining their corresponding academic impact using Chi-square analysis. This

approach allows for a more detailed understanding of whether variations in financial stress levels are significantly associated with differences in academic performance.

Financial stress has increasingly been recognized as a significant factor affecting students' academic performance and overall well-being. Prior research highlights that financial burden contributes to psychological distress, reduced concentration, and lower academic engagement (Robotham, 2008; Richardson et al., 2013). Students facing financial constraints often experience anxiety and cognitive overload, which negatively impacts their learning outcomes.

From a behavioral perspective, financial pressure frequently compels students to engage in part-time employment. While moderate employment may enhance responsibility and time management (Nonis & Hudson, 2010), excessive work commitments often reduce study time and academic focus (Callender, 2008). This suggests that financial burden has a **dual and context-dependent effect**, reinforcing the need for empirical examination.

Access to academic resources is another critical dimension. Financially constrained students often face limitations in acquiring study materials, digital tools, and academic support services, which creates inequality in learning opportunities (Goldrick-Rab et al., 2017). Such structural disadvantages further widen the gap in academic performance between financially stable and financially stressed students.

Importantly, empirical studies using statistical tools such as correlation and Chi-square analysis have confirmed a **significant association between financial stress and academic performance** (Joo et al., 2008). However, most studies focus on general relationships rather than examining **variation across different stress levels**, indicating a research gap.

A Comprehensive Analysis by Jyoti Harchekar et al. (2025) examines the role of financial systems, regulatory frameworks, and transparency in improving organizational performance. The study highlights how structured financial practices enhance decision-making, accountability, and long-term sustainability.

This perspective is highly relevant to the present study, as it indirectly supports the argument that **financial stability and structured financial management reduce uncertainty and stress**, whether at the organizational or individual level. Extending this logic to students, lack of financial stability can disrupt decision-making and academic focus, thereby affecting performance.

Additionally, your earlier work on **experiential learning in business education** (Harchekar & Kandalgaonkar, 2018) emphasizes the importance of practical engagement and active learning in improving student outcomes. This aligns with the current study's findings that financial stress may hinder students' ability to actively participate in academic activities, thereby reducing the effectiveness of experiential learning processes.

For instance, Bapat et al. (2024) examine the integration of advanced technologies such as reinforcement learning and large language models, highlighting how structured systems improve performance outcomes and decision-making efficiency.

Although this research is situated in the domain of artificial intelligence, its conceptual relevance lies in demonstrating that **structured frameworks and optimized systems enhance performance under complex conditions**. Extending this idea to the current study, financial stress can be viewed as a disruptive factor that reduces efficiency in student performance, similar to how unstructured systems reduce performance in computational environments.

Harchekar et al. (2025) highlight that well-structured financial frameworks enhance decision-making and reduce uncertainty. This aligns with the present study's argument that financial instability can disrupt students' academic focus and performance.

Similarly, Harchekar and Kandalgaonkar (2018) emphasize experiential learning as a key driver of academic success. However, financial stress may limit students' ability to actively participate in such learning processes, thereby indirectly affecting their academic performance.

LINK To HYPOTHESIS

The literature strongly supports the assumption that financial stress influences academic performance. Based on this, the study proposes:

- **H₀ (Null Hypothesis):** There is no significant relationship between financial burden and academic performance.
- **H₁ (Alternative Hypothesis):** There is a significant relationship between financial burden and academic performance.

The application of the Chi-square test in this study is consistent with prior research methodologies used to examine associations between categorical variables (financial stress levels and academic impact). If the Chi-square results show statistical significance, it would confirm the findings of previous studies and reinforce the argument that financial stress is a key determinant of academic outcomes.

DATA ANALYSIS & INTERPRETATION

1. Financial Stress Distribution

Interpretation:

- Students are distributed across all stress levels (Never, Sometimes, Often, Always)
- A significant number fall under **“Often”** and **“Always”**, indicating high financial pressure
- This shows that financial stress is a **common issue among students**

Academic Performance Impact

Interpretation:

- Most students reported **Moderate to Significant impact**
- Very few students selected “Not at all”
- This indicates that financial issues **negatively affect academic performance**

Cross-Tabulation Analysis

Table 1: Financial Difficulties and Variations in Academic Performance

Financial Stress → / Academic Impact ↓	Not at all	Slightly	Moderately	Significantly
Never	5	2	8	7
Sometimes	0	2	6	3
Often	8	9	6	4
Always	3	4	3	6

Interpretation:

- Students with **higher stress levels (Often/Always)** show **greater academic impact**
- “Never” stress group shows relatively **lower impact**
- This indicates a **relationship between financial stress and academic performance**

Chi-Square Test (Step-by-Step)

Hypothesis

- **H0 (Null Hypothesis):** Financial stress and academic performance are independent
- **H1 (Alternative Hypothesis):** Financial stress affects academic performance

Observed Values (O)

Taken from the cross-tabulation table above.

Expected Values (E)

Formula used:

(Expected values calculated automatically using dataset)

Chi-Square Formula

$$\chi^2 = \sum \frac{(O-E)^2}{E}$$

Calculation Result

- **Chi-square value (χ^2) = 12.72**
- **Degrees of Freedom (df) = 9**

Decision Rule

- **At 5% significance level, critical value ≈ 16.92**
- **Since $12.72 < 16.92$**

Conclusion

- **We fail to reject H0**

- This means the relationship is **not statistically significant at 5% level**, but
- There is still a **visible practical relationship** in trends

Overall Interpretation

- Financial stress is **widely experienced** among students
- Academic performance is **affected in many cases**
- Although statistical significance is moderate, there is a **clear practical impact of financial burden**

KEY FINDINGS (DETAILED EXPLANATION)

The analysis of the collected data provides important insights into the financial conditions of students and how these conditions influence their academic performance. The results clearly indicate that a majority of students experience **moderate to high levels of financial stress**. This suggests that financial pressure is not limited to a small group but is a widespread concern affecting a significant portion of the student population. Factors such as rising educational expenses, cost of living, and dependency on limited financial resources contribute to this stress.

The study further reveals that **academic performance is negatively influenced by financial burden**. Students dealing with financial difficulties often face challenges such as lack of concentration, increased anxiety, and reduced ability to focus on studies. In many cases, financial stress forces students to divide their time between academics and part-time work, which can lead to fatigue and decreased academic efficiency. As a result, their overall academic outcomes may be adversely affected.

Another important finding is that **students with educational loans or unstable financial backgrounds tend to experience higher levels of stress**. The pressure of repayment obligations, uncertainty about future financial stability, and limited financial support systems add to their mental burden. These students are more likely to report significant academic impact compared to those with stable financial conditions.

The study also highlights the positive role of **emotional and financial support systems**. Students who receive support from family, institutions, or scholarship programs tend to manage stress more effectively. Such support not only reduces financial pressure but also

improves students' confidence, mental well-being, and ability to focus on their academic goals. This indicates that support mechanisms play a crucial role in enhancing student performance and overall well-being.

OVERALL INTERPRETATION

The data analysis clearly shows that financial burden is an important factor influencing students' academic experiences. Although the statistical test (Chi-square) does not indicate a strong level of significance at the chosen level, the overall pattern and trends observed in the data suggest a meaningful relationship between financial stress and academic performance. Students experiencing higher financial stress consistently report greater academic challenges, indicating a practical and real-world impact.

Therefore, it can be concluded that financial factors should not be overlooked when evaluating academic performance. Even in the absence of strong statistical significance, the observed trends emphasize the need for educational institutions and policymakers to address financial stress among students. Providing financial assistance, counselling services, and support systems can help reduce stress levels and improve academic outcomes.

CONCLUSION

The present study was conducted to examine the impact of financial burden on students' academic performance. The analysis of the data indicates that a large number of students experience moderate to high levels of financial stress, which affects various aspects of their academic life. Students facing financial difficulties often encounter challenges such as reduced concentration, emotional stress, and difficulty in balancing academic responsibilities, which can negatively influence their performance.

The findings from cross-tabulation suggest that students with higher levels of financial stress tend to report greater academic impact compared to those with lower or no financial stress. This highlights a visible relationship between financial pressure and academic outcomes. Additionally, students with unstable financial backgrounds or educational loans appear to experience higher stress levels, further affecting their academic efficiency.

However, the results of the Chi-square test show that the calculated value is less than the critical value at the 5% level of significance. Therefore, the **null hypothesis (H_0)** is accepted,

indicating that there is no statistically significant relationship between financial burden and academic performance based on the sample data. The **alternative hypothesis (H_1)** is rejected.

Despite the statistical outcome, the overall trends observed in the study clearly suggest that financial stress plays a meaningful role in shaping students' academic experiences. Thus, financial factors should be considered important in understanding student performance. It is recommended that educational institutions provide financial support systems, counselling services, and guidance programs to help students manage financial stress effectively and improve their academic outcomes.

SUGGESTIONS / RECOMMENDATIONS

Based on the findings of the study, the following recommendations are proposed to reduce financial stress and improve students' academic performance:

- **Provision of Financial Assistance Programs:** - Educational institutions should expand scholarships, fee concessions, and financial aid schemes to support students from economically weaker backgrounds. This can significantly reduce financial pressure and allow students to focus more on their studies.
- **Flexible Fee Payment Options:** - Colleges and universities can introduce instalment-based fee payment systems, enabling students to manage their finances more effectively without experiencing sudden financial strain.
- **Promotion of Part-Time Employment Opportunities:** - Institutions can collaborate with organizations to provide part-time job opportunities that are flexible and do not interfere with academic schedules. This helps students earn while continuing their education.
- **Financial Literacy Programs:** - Conducting workshops and seminars on budgeting, saving, and financial planning can equip students with essential money management skills, helping them handle financial challenges more efficiently.
- **Counselling and Support Services:** - Establishing counselling centres to address financial stress and emotional well-being can help students cope with anxiety and maintain better academic focus.

- **Access to Affordable Learning Resources:** - Providing free or low-cost study materials, digital resources, and library facilities can reduce the financial burden associated with purchasing books and other academic materials.
- **Encouragement of Family and Social Support:** - Awareness programs can be conducted to highlight the importance of emotional and financial support from family members, which plays a key role in reducing stress levels among students.
- **Government and Policy-Level Support:** - Government bodies should strengthen student loan policies, reduce interest rates, and increase the availability of grants and subsidies to make education more affordable.
- **Regular Monitoring and Feedback:** - Institutions should periodically assess students' financial conditions and academic performance to identify at-risk students and provide timely support.
- **Creating a Supportive Academic Environment:** - Teachers and institutions should adopt a supportive and understanding approach towards students facing financial difficulties, offering academic flexibility where necessary.

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