Governments and institutions support entrepreneurship through education, training, financial assistance, and startup policies.

3. RESEARCH OBJECTIVES

- To examine the role of educational background and institutional support in shaping entrepreneurial aspirations.
- To analyze the challenges and barriers perceived by students in pursuing entrepreneurship as a career option.

4. RESEARCH QUESTIONS

- How do educational background and institutional support influence the entrepreneurial aspirations of Arts and Science college students?
- What challenges and barriers do students perceive in pursuing entrepreneurship as a career option?

5. STATEMENT OF THE PROBLEM

Entrepreneurship is increasingly recognized as a key driver of economic growth, innovation, and employment generation, particularly among youth. College students represent a vital segment of potential entrepreneurs, as their aspirations and career choices shape the future workforce. Despite the growing emphasis on entrepreneurship education and startup promotion, many Arts and Science college students continue to show limited inclination toward entrepreneurial careers. This raises concerns about the effectiveness of educational background and institutional support systems in nurturing entrepreneurial aspirations. Educational factors such as curriculum design, exposure to entrepreneurial training, skill development programs, and mentorship play a crucial role in shaping students' entrepreneurial mindset. Similarly, institutional support in the form of incubation centers, career guidance, financial assistance, and industry linkages can significantly influence students' willingness to pursue entrepreneurship. However, the extent to which these factors actually impact students' aspirations remains unclear.

Moreover, students often perceive various challenges and barriers, including lack of capital, fear of failure, inadequate knowledge, social pressure, and limited institutional encouragement, which may discourage them from choosing entrepreneurship as a career. Understanding these perceived obstacles is essential to address gaps in existing support mechanisms. Therefore, the present study seeks to examine the role of educational background and institutional support in shaping entrepreneurial aspirations and to analyze the challenges and barriers perceived by students in pursuing entrepreneurship as a career option.

6. IMPORTANCE OF THE RESEARCH

The importance of the present research lies in its focus on understanding the factors that shape entrepreneurial aspirations among college students, who represent the future workforce and potential entrepreneurs of the nation. By examining the role of educational background and institutional support, the study highlights how academic curriculum, training programs, mentorship, and institutional facilities influence students' interest in entrepreneurship. This understanding can help educational institutions design more effective entrepreneurship-oriented courses and support systems that encourage innovative thinking and self-employment.

The research is also significant in identifying the challenges and barriers perceived by students in pursuing entrepreneurship as a career option. Recognizing these obstacles, such as lack of financial resources, inadequate guidance, fear of risk, and limited institutional encouragement, provides valuable insights for policymakers, educators, and administrators. Addressing these challenges can help reduce hesitation among students and promote a more supportive entrepreneurial environment.

Furthermore, the findings of this study can assist colleges, universities, and government agencies in formulating policies and programs that foster entrepreneurial culture among youth. By bridging the gap between education and entrepreneurial practice, the research contributes to employment generation, economic development, and youth empowerment. Overall, this study is important for strengthening entrepreneurship education and encouraging students to view entrepreneurship as a viable and attractive career choice.

7. SCOPE OF THE RESEARCH

The scope of the present research is centered on examining the entrepreneurial aspirations of Arts and Science college students with specific reference to the role of educational background and institutional support. The study focuses on understanding how factors such as curriculum content, entrepreneurship education, skill development programs, training, and mentoring provided by institutions influence students' interest in entrepreneurship. It also explores the availability and effectiveness of institutional facilities such as career guidance cells, incubation centers, and start-ups support mechanisms.

In addition, the research scope includes the identification and analysis of challenges and barriers perceived by students in pursuing entrepreneurship as a career option. These challenges may include financial constraints, lack of practical knowledge, fear of failure, social and family pressure, and limited access to resources and guidance. By capturing students' perceptions, the study aims to provide a comprehensive view of the difficulties faced by aspiring entrepreneurs. The research is limited to Arts and Science college students and does not include students from professional or technical institutions. It is also geographically confined to the selected study area, making the findings context-specific. Nevertheless, the study offers valuable insights that can serve as a reference for educators, institutions, and policymakers seeking to strengthen entrepreneurship education and support systems among college students.

8. REVIEW OF LITERATURE

Sathya, A., & Velmurugan, V. P. (2021) identified that the factors that influence entrepreneurial aspirations among arts and science college students. The structure questionnaire was used to collect primary data about creative thinking, leadership, commitment, communication skills, and achievement motivation factors determining entrepreneurial aspirations for this study. All data was collected and analysed using a five-point Likert scale, with 1 representing "strongly disagree" and 5 representing "strongly agree." For this study, the researcher employed the purposive sampling technique. The sample size for this study was 150 college students from the arts and sciences. It is concluded that the factors of creative thinking, leadership, commitment, communication skills, and achievement motivation influence the entrepreneurial aspirations of Kanyakumari district arts and science college

students. It has been discovered that the variables creative thinking, leadership, commitment, communication skills, and achievement motivation are closely related and have an impact on the entrepreneurial aspirations of Kanyakumari district arts and science college students. The study's findings will assist planners and policymakers in taking the necessary steps to promote entrepreneurial intelligence among arts and science college students. Key-words: Entrepreneurial Aspiration.

Mani, A., & Manoharan, G. (2025) opined that in the dynamic higher education environment, youth entrepreneurship is increasingly seen as a source of innovation and economic progress. This article discusses how an entrepreneurial attitude leads to huge career and personal success and how it affects college students' futures. It examines curriculum design, institutional assistance, and young entrepreneurs who have turned unique ideas into successful enterprises. In this article, researchers examine student entrepreneurs' financing challenges, academic obligations, and market competitiveness. We also examined how emerging technologies are elevating entrepreneurship, the importance of mentorship and support networks, and college student business models. We do so to show how enabling the next generation of entrepreneurs boosts job prospects and societal and economic advancement.

Suresh, G., & Krishnamurthy, S. (2014) analysed that developing entrepreneurial skills among youth is more important for the growth of an economy like India. It will create employment opportunities and increase the country's exports, which in turn will lead to improvement in the standard of living. The important skill with regard to the development of entrepreneurs is the entrepreneurial traits. The present paper analyzes whether the entrepreneurial traits among the commerce students of Arts and Science colleges in Theni district play an important role in developing their own establishments. The study also seeks to find out if there is any relationship between socioeconomic factors and the level of entrepreneurial traits. The paper concludes that entrepreneurial traits are important factors in developing prospective entrepreneurs and creating new ventures, and the educational institutions as well as the government should lend a helping hand to the students in this regard.

9. RESEARCH HYPOTHESES

- There is a significant relationship between educational background, institutional support, and the entrepreneurial aspirations of students.
- The perceived challenges and barriers have a significant impact on students' intention to pursue entrepreneurship as a career option.

10. RESEARCH METHODOLOGY

Research methodology refers to the systematic framework used to plan, conduct, and analyze research. It explains how data is collected, measured, and interpreted to answer research questions or test hypotheses. The study adopted a descriptive research design to examine the entrepreneurial aspirations of Arts and Science college students in Rajapalayam. The research used both primary and secondary data. Primary data is collected directly from students through a structured questionnaire to capture their views, aspirations, and perceived barriers. Secondary data is gathered from books, research journals, government reports, websites, and previous studies related to entrepreneurship and youth development. A sample size of 120 Arts and Science college students is selected for the study. The study used simple random sampling technique, ensuring that every student in the population has an equal chance of being selected. This method reduced bias and improves the reliability of the findings. The target population of the study consists of Arts and Science college students studying in various colleges located in Rajapalayam. The focus is on undergraduate students, as they are at a crucial stage of career decision-making and entrepreneurial development.

11. SCALING TECHNIQUE

A structured questionnaire is prepared with statements covering areas such as students' interest in entrepreneurship, influence of educational background, institutional support, and perceived barriers. Respondents have indicated their level of agreement on a **five-point scale**:

- 5 – Strongly Agree
- 4 – Agree
- 3 – Neutral
- 2 – Disagree
- 1 – Strongly Disagree

12. STATISTICAL TESTS

- Exploratory Factor Analysis
- Multiple Regression Analysis

13. DATA ANALYSIS AND RESULTS DISCUSSION

13.1 Exploratory Factor Analysis in relation to Role of Educational Background and Institutional Support in shaping Entrepreneurial Aspirations

Exploratory Factor Analysis (EFA) is a statistical technique used to identify the underlying structure of relationships among a large set of observed variables. It helps reduce data complexity by grouping correlated variables into factors that represent latent constructs. EFA is commonly used in scale development and theory building when the factor structure is unknown. The suitability of the data for factor analysis was assessed using the Kaiser–Meyer–Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity.

Table 1(a)
KMO and Bartlett's Test in relation to Role of Educational Background and Institutional Support in shaping Entrepreneurial Aspirations

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.805
Bartlett's Test of Sphericity	Approx. Chi-Square	349.415
	df	6
	Sig.	.000

The KMO value of 0.805 indicates a high level of sampling adequacy. According to Kaiser's classification, KMO values between 0.80 and 0.89 are considered "meritorious," suggesting that the patterns of correlations among the variables are sufficiently compact and reliable for factor analysis. This implies that the variables related to educational background and institutional support share enough common variance to justify the extraction of underlying factors influencing entrepreneurial aspirations. Bartlett's Test of Sphericity further supports this conclusion. The test yielded a Chi-square value of 349.415 with 6 degrees of freedom, which is statistically significant ($p = .000$). This significant result indicates that the correlation matrix is not an identity matrix, meaning that the variables are significantly correlated with one another. In other words, the relationships among educational background, institutional support, and entrepreneurial aspirations are strong enough to proceed with factor analysis.

Table 1(b) presents the communalities of the research variables measuring the role of educational background and institutional support in shaping entrepreneurial aspirations, extracted using the Principal Component Analysis (PCA) method. Communalities represent the proportion of variance in each observed variable that is accounted for by the extracted component(s). The initial communalities for all variables are 1.000, which is typical in PCA and indicates that the full variance of each variable was considered prior to extraction.

Table 1 (b)
Communalities

Research Variables of the Role of Educational Background and Institutional Support in shaping Entrepreneurial Aspirations	Initial	Extraction
My educational background has helped me develop skills necessary for entrepreneurship.	1.000	.690
Courses offered by my institution encourage students to consider entrepreneurship as a career.	1.000	.891
Faculty members provide guidance and motivation for entrepreneurial activities.	1.000	.767
Institutional support such as incubation centers or workshops influences my interest in starting a business.	1.000	.803

After extraction, the communalities show relatively high values, ranging from 0.690 to 0.891, indicating that a substantial amount of variance in each variable is explained by the extracted component(s). The variable *"Courses offered by my institution encourage students to consider entrepreneurship as a career"* exhibits the highest extraction value (0.891), suggesting that institutional curriculum plays a particularly strong role in influencing entrepreneurial aspirations. This implies that structured academic courses significantly contribute to developing an entrepreneurial mindset among students. The statement *"Institutional support such as incubation centers or workshops influences my interest in starting a business"* records a high extraction value of 0.803, highlighting the importance of institutional infrastructure and support mechanisms in fostering entrepreneurial interest. This finding underscores the role of practical exposure and support systems provided by institutions in shaping students' inclination toward entrepreneurship.

Similarly, the variable *"Faculty members provide guidance and motivation for entrepreneurial activities"* has an extraction value of 0.767, indicating that faculty mentorship and encouragement are well represented by the extracted component(s). This suggests that faculty involvement plays a meaningful role in motivating students and enhancing their entrepreneurial aspirations. The variable *"My educational background has helped me develop skills necessary for entrepreneurship"* shows an extraction value of 0.690, which, although comparatively lower than the other variables, still reflects a strong contribution. This indicates that general educational background significantly supports the development of entrepreneurial skills, even if its influence is slightly less direct than targeted institutional initiatives.

Table 1(c) presents the Total Variance Explained by the components extracted through Principal Component Analysis (PCA) in examining the role of educational background and institutional support in shaping entrepreneurial aspirations. This table provides information on the eigenvalues, percentage of variance explained by each component, and the cumulative variance explained.

Table 1(c)
Total Variance Explained in relation to Role of Educational Background and Institutional Support in shaping Entrepreneurial Aspirations

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.151	78.786	78.786	3.151	78.786	78.786
2	.414	10.356	89.142			
3	.310	7.756	96.898			
4	.124	3.102	100.000			

The results show that Component 1 has an eigenvalue of 3.151, which is substantially higher than the commonly accepted criterion of 1.00 for factor retention (Kaiser's criterion). This single component explains 78.786% of the total variance, indicating that a very large proportion of the information contained in the original variables is captured by this component. The high percentage of variance suggests that the variables related to educational background and institutional support are strongly interrelated and collectively represent a dominant underlying construct influencing entrepreneurial aspirations. In contrast, Components 2, 3, and 4 have eigenvalues of 0.414, 0.310, and 0.124, respectively, all of which are well below 1.00. Although these components together account for additional variance, their individual contributions are relatively small (10.356%, 7.756%, and 3.102%, respectively) and do not meet the criterion for meaningful factor extraction. As a result, these components

were not retained for further analysis, reinforcing the decision to extract only one principal component.

The extraction sums of squared loadings further confirm this outcome, as only one component was extracted, explaining the same 78.786% of the total variance with a cumulative variance of 78.786%**.** This indicates that the extracted component adequately summarizes the shared variance among the observed variables related to educational background, institutional curriculum, faculty support, and institutional facilities.

Table 1(d) presents the Component Matrix derived from Principal Component Analysis (PCA), illustrating the factor loadings of the research variables related to the role of educational background and institutional support in shaping entrepreneurial aspirations. Factor loadings represent the strength and direction of the relationship between each observed variable and the extracted component. Higher loadings indicate a stronger contribution of the variable to the underlying component.

Table 1(d)
Component Matrix

Research Variables of the Role of Educational Background and Institutional Support in shaping Entrepreneurial Aspirations	**Component 1**
My educational background has helped me develop skills necessary for entrepreneurship.	.831
Courses offered by my institution encourage students to consider entrepreneurship as a career.	.944
Faculty members provide guidance and motivation for entrepreneurial activities.	.876
Institutional support such as incubation centers or workshops influences my interest in starting a business.	.896

The results show that only one component was extracted, confirming the unidimensional nature of the construct. All four variables load strongly on Component 1, with factor loadings ranging from 0.831 to 0.944, which are well above the commonly accepted minimum threshold of 0.50. This indicates that each variable makes a substantial contribution to the component and is closely associated with the underlying factor influencing entrepreneurial aspirations. Among the variables, *"Courses offered by my institution encourage students to consider entrepreneurship as a career"* exhibits the highest factor loading (0.944)**.** This suggests that institutional curriculum plays the most influential role in defining the extracted component, highlighting the importance of entrepreneurship-oriented courses in fostering students' entrepreneurial aspirations. The variable *"Institutional support such as incubation centers or workshops influences my interest in starting a business"* shows a strong loading of 0.896, emphasizing the critical role of institutional infrastructure and support mechanisms in stimulating interest in entrepreneurship. This reflects the impact of practical exposure and experiential learning opportunities provided by educational institutions. Similarly, *"Faculty members provide guidance and motivation for entrepreneurial activities"* has a high loading of 0.876, indicating that faculty mentorship and encouragement are integral elements of the underlying construct. This finding underscores the importance of academic guidance and motivational support in nurturing entrepreneurial intentions.

The statement *"My educational background has helped me develop skills necessary for entrepreneurship"* records a loading of 0.831, which, although comparatively lower than the others, still represents a strong relationship with the extracted component. This suggests that general educational experiences contribute significantly to the development of entrepreneurial skills and aspirations.

13.2 Exploratory Factor Analysis in relation to Challenges and Barriers perceived by Students in pursuing Entrepreneurship as a Career Option

Table 2(a) presents the results of the Kaiser–Meyer–Olkin (KMO) Measure of Sampling Adequacy and Bartlett's Test of Sphericity conducted to assess the suitability of the data for factor analysis in relation to the challenges and barriers perceived by students in pursuing entrepreneurship as a career option.

Table 2(a)
KMO and Bartlett's Test in relation to Challenges and Barriers perceived by Students in pursuing Entrepreneurship as a Career Option

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.737
Bartlett's Test of Sphericity	Approx. Chi-Square	284.449
	df	6
	Sig.	.000

The KMO value of 0.737 indicates a good level of sampling adequacy. According to established guidelines, KMO values between 0.70 and 0.79 are considered acceptable to good, suggesting that the correlations among the variables are sufficiently strong for factor analysis. This implies that the items measuring perceived challenges and barriers share adequate common variance and are appropriate for identifying underlying factors influencing students' entrepreneurial career choices. Bartlett's Test of Sphericity further confirms the appropriateness of factor analysis. The test yields an approximate Chi-square value of 284.449 with 6 degrees of freedom**,** which is statistically significant (p = .000)**.** This significant result indicates that the correlation matrix is not an identity matrix, meaning that the variables are significantly correlated with one another. Hence, the observed relationships among the perceived challenges and barriers are strong enough to justify the application of factor analysis.

Table 2(b) presents the communalities of the research variables measuring the challenges and barriers perceived by students in pursuing entrepreneurship as a career option, extracted using Principal Component Analysis (PCA)**.** Communalities indicate

the proportion of variance in each variable that is explained by the extracted component(s). As is standard in PCA, the initial communalities for all variables are 1.000, reflecting that the total variance of each variable was considered before extraction.

Table 2(b)
Communalities

Research Variables of Challenges and Barriers perceived by Students in pursuing Entrepreneurship as a Career Option	Initial	Extraction
Lack of financial resources discourages me from choosing entrepreneurship as a career.	1.000	.060
Fear of failure is a major barrier to starting my own business.	1.000	.883
Insufficient practical knowledge makes entrepreneurship difficult to pursue.	1.000	.802
Family and social expectations make entrepreneurship a less preferred career choice.	1.000	.892

After extraction, the communalities reveal notable variation among the variables. The statement *"Fear of failure is a major barrier to starting my own business"* shows a very high extraction value of 0.883, indicating that approximately 88.3% of its variance is explained by the extracted component(s). This suggests that fear of failure is a strongly represented and central barrier influencing students' perceptions of entrepreneurship as a career choice. Similarly, the variable *"Family and social expectations make entrepreneurship a less preferred career choice"* has the highest extraction value of 0.892, implying that social and familial pressures are a dominant and well-captured barrier within the underlying factor structure. This highlights the significant role played by societal norms and expectations in shaping students' reluctance toward entrepreneurial careers.

The statement *"Insufficient practical knowledge makes entrepreneurship difficult to pursue"* records a high extraction value of 0.802, indicating that a substantial proportion of variance in this variable is explained by the extracted component(s). This finding underscores the importance of practical skills and experiential knowledge, suggesting that the perceived lack of hands-on expertise is a major obstacle for students considering entrepreneurship. In contrast, the variable *"Lack of financial resources discourages me from choosing entrepreneurship as a career"* shows a very low extraction value of 0.060. This indicates that only 6% of the variance in this variable is explained by the extracted component(s), suggesting that it is poorly represented in the current factor solution. This may imply that financial constraints operate as an independent concern or are perceived differently by students compared to psychological, social, and knowledge-based barriers. From a methodological perspective, such a low communality raises concerns about the suitability of this item for inclusion in the factor structure and suggests that it may need to be reviewed, reworded, or excluded in subsequent analyses.

Table 2(c) presents the Total Variance Explained by the components extracted through Principal Component Analysis (PCA) in relation to the challenges and barriers perceived by students in pursuing entrepreneurship as a career option. This table reports the eigenvalues, percentage of variance explained by each component, and the cumulative variance accounted for by the components.

Table 2(c)
Total Variance Explained in relation to Challenges and Barriers perceived by Students in pursuing Entrepreneurship as a Career Option

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.637	65.914	65.914	2.637	65.914	65.914
2	.968	24.210	90.124			
3	.266	6.651	96.775			
4	.129	3.225	100.000			

The results indicate that Component 1 has an eigenvalue of 2.637, which exceeds the recommended threshold value of 1.00 used for factor retention under Kaiser's criterion. This component alone explains 65.914% of the total variance, suggesting that a substantial proportion of the variance in students' perceptions of challenges and barriers is captured by a single dominant factor. The high percentage of variance explained indicates that the major perceived barriers to entrepreneurship are strongly interrelated and can be represented by a common underlying dimension. The remaining components—Component 2 (eigenvalue = 0.968), Component 3 (eigenvalue = 0.266), and Component 4 (eigenvalue = 0.129)—all have eigenvalues below 1.00. Although Component 2 accounts for an additional 24.210% of the variance, it does not meet the criterion for retention and therefore was not extracted. Components 3 and 4 contribute relatively small proportions of variance (6.651% and 3.225%, respectively), indicating limited explanatory power.

The extraction sums of squared loadings further confirm that only one component was retained, explaining 65.914% of the total variance, with the cumulative variance also reaching 65.914%. This demonstrates that the extracted component adequately summarizes the shared variance among the observed variables related to perceived challenges and barriers.

Table 2(d) presents the Component Matrix obtained through Principal Component Analysis (PCA) for the variables measuring the challenges and barriers perceived by students in pursuing entrepreneurship as a career option. The component matrix displays the factor loadings, which indicate the strength and direction of the relationship between each observed variable and the extracted component. In this analysis, one

component was extracted, suggesting that the perceived challenges and barriers form a largely unidimensional construct.

Table 2(d)
Component Matrix

Research Variables of Challenges and Barriers perceived by Students in pursuing Entrepreneurship as a Career Option.	**Component 1**
Lack of financial resources discourages me from choosing entrepreneurship as a career.	-.244
Fear of failure is a major barrier to starting my own business.	.940
Insufficient practical knowledge makes entrepreneurship difficult to pursue.	.895
Family and social expectations make entrepreneurship a less preferred career choice.	.945

The results show that three variables load very strongly and positively on Component 1. The variable *"Family and social expectations make entrepreneurship a less preferred career choice"* has the highest factor loading (0.945), indicating that social and familial pressures are the most influential barriers shaping students' reluctance toward entrepreneurship. This finding highlights the powerful role of societal norms and expectations in influencing career decisions.

Similarly, *"Fear of failure is a major barrier to starting my own business"* exhibits a very high loading of 0.940, suggesting that psychological factors, particularly risk aversion and fear of unsuccessful outcomes, are central to students' perceptions of entrepreneurial barriers. This indicates that emotional and cognitive concerns strongly influence students' willingness to pursue entrepreneurship.

The variable *"Insufficient practical knowledge makes entrepreneurship difficult to pursue"* also shows a high positive loading (0.895), demonstrating that a perceived lack of hands-on skills and real-world experience is a significant obstacle. This underscores the importance of practical training and experiential learning in reducing perceived barriers to entrepreneurship. In contrast, the statement *"Lack of financial resources discourages me from choosing entrepreneurship as a career"* has a negative and very weak loading (-0.244) on the extracted component. This suggests that financial constraints do not align strongly with the dominant underlying factor representing perceived barriers in this study. The weak and negative loading indicates that financial limitations may be viewed differently by students or may operate as a separate dimension not captured by the extracted component. This result is also consistent with the very low communality observed for this variable in the earlier analysis.

13.3 Multiple Regression Analysis in relation to Entrepreneurial Aspirations of Arts and Science College Students in Rajapalayam

Multiple regression analysis is a statistical method used to examine the relationship between one dependent variable and two or more independent variables. It estimates the unique contribution of each predictor while controlling for others, and is widely used for prediction, explanation, and hypothesis testing. The Model Summary table presents the results of a **simple** linear regression analysis conducted to examine the influence of challenges and barriers perceived by students in pursuing entrepreneurship as a career option on the role of educational background and institutional support in shaping entrepreneurial aspirations **among** Arts and Science college students in Rajapalayam**.**

Table 3(a)
Model Summary with regard to Entrepreneurial Aspirations of Arts and Science College Students in Rajapalayam

Model 1	**R**	**R Square**	**Adjusted R Square**	**Std. Error of the Estimate**	**Durbin-Watson**
	.632[a]	.399	.394	2.12981	1.967

The value of the correlation coefficient (R = 0.632) indicates a moderate to strong relationship between the predictor variable (challenges and barriers) and the dependent variable (educational background and institutional support shaping entrepreneurial aspirations). This suggests that students' perceptions of challenges and barriers are meaningfully associated with how they perceive the role of their educational background and institutional support in influencing their entrepreneurial aspirations. The R Square value of 0.399 indicates that 39.9% of the variance in the dependent variable is explained by the predictor variable. In other words, challenges and barriers perceived by students account for nearly 40% of the variation in how educational background and institutional support shape entrepreneurial aspirations. This represents a substantial explanatory power for a social science model, indicating that perceived barriers play an important role in influencing students' entrepreneurial outlook. The Adjusted R Square value of 0.394, which adjusts for sample size and number of predictors, is only slightly lower than the R Square value. This minimal difference suggests that the model is stable and reliable, with little inflation in the explained variance. It confirms that the predictor variable contributes meaningfully to the model and that the results are not due to chance.

The Standard Error of the Estimate (2.12981) reflects the average distance that the observed values fall from the regression line. A relatively low standard error indicates that the model's predictions are reasonably accurate and that the observed values of entrepreneurial aspirations are fairly close to the values predicted by the regression equation. Finally, the Durbin–Watson statistic of 1.967 is very close to the ideal value of 2. This indicates the absence of autocorrelation among the residuals, satisfying one of the key assumptions of regression analysis and confirming that the model is statistically sound.

Table 3(b) presents the results of the ANOVA (Analysis of Variance) for the regression model examining the effect of challenges and barriers perceived by students in pursuing

entrepreneurship as a career option on the role of educational background and institutional support in shaping entrepreneurial aspirations among Arts and Science college students in Rajapalayam. ANOVA in regression is used to test whether the overall regression model is statistically significant and whether the predictor variable reliably explains variation in the dependent variable.

Table 3(b)
ANOVA

Model 1	Sum of Squares	df	Mean Square	F	Sig.
Regression	355.065	1	355.065	78.275	.000[b]
Residual	535.260	118	4.536		
Total	890.325	119			

The regression sum of squares (355.065) represents the portion of the total variance in entrepreneurial aspirations that is explained by the predictor variable—perceived challenges and barriers. The residual sum of squares (535.260) represents the variance that remains unexplained by the model. The total sum of squares (890.325) is the sum of the regression and residual sums of squares, representing the total variability in the dependent variable.

With 1 degree of freedom for the regression and 118 degrees of freedom for the residuals, the mean square for regression (355.065) is much higher than the mean square for residuals (4.536). This results in a computed F-value of 78.275, which tests the null hypothesis that the regression coefficient is equal to zero (i.e., that the predictor variable has no effect on the dependent variable). The associated p-value (Sig. = 0.000) is less than the conventional threshold of 0.05, indicating that the regression model is highly statistically significant. In practical terms, this means that challenges and barriers perceived by students have a significant effect on the role of educational background and institutional support in shaping their entrepreneurial aspirations. The high F-value reflects the strength of this effect and confirms that the model provides a meaningful explanation of the variance in the dependent variable.

Table 3(c) presents the regression coefficients for the model examining the impact of challenges and barriers perceived by students in pursuing entrepreneurship as a career option on the role of educational background and institutional support in shaping entrepreneurial aspirations**.** The coefficients provide detailed information about the strength, direction, and significance of the relationship between the predictor and the dependent variable.

Table 3(c)
Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.530	1.498		2.356	.020
	Challenges and Barriers perceived by Students in pursuing Entrepreneurship as a Career Option.	.788	.089	.632	8.847	.000

The unstandardized coefficient (B) for the constant **is** 3.530, with a standard error of 1.498**.** This value represents the predicted level of entrepreneurial aspirations shaped by educational background and institutional support when the perceived challenges and barriers are zero. The associated t-value **(**2.356**)** and p-value (0.020) indicate that the constant is significantly different from zero, establishing a meaningful baseline level of the dependent variable. The unstandardized coefficient (B) for the predictor variable—challenges and barriers perceived by students—is 0.788 with a standard error of 0.089. This positive coefficient indicates that for every one-unit increase in perceived challenges and barriers, the role of educational background and institutional support in shaping entrepreneurial aspirations increases by 0.788 units, holding all else constant. The positive direction of the relationship suggests that higher awareness or perception of challenges may be associated with greater reliance on educational and institutional support to pursue entrepreneurship.

The standardized coefficient (Beta = 0.632) indicates the strength of the relationship in standardized terms, allowing comparison across variables. A Beta value of 0.632 represents a moderately strong effect, suggesting that perceived challenges and barriers are an important determinant of how students perceive the influence of educational background and institutional support on their entrepreneurial aspirations. The t-value of 8.847 and the p-value of 0.000 indicate that the relationship is highly statistically significant**,** meaning the effect of perceived challenges and barriers on entrepreneurial aspirations is unlikely to have occurred by chance.

14. FINDINGS

- The factor analysis results indicate the presence of a single dominant underlying component influencing entrepreneurial aspirations. Component 1, with an eigenvalue of 3.151, satisfies Kaiser's criterion and accounts for a substantial 78.786% of the total variance, demonstrating that the variables related to educational background, institutional curriculum, faculty guidance, and institutional support are highly interrelated and collectively reflect one strong construct. The remaining components have eigenvalues well below 1.00 and explain only marginal proportions of variance, making them unsuitable for retention. The extraction of a single component therefore provides an efficient and robust summary of the shared variance among the variables, confirming that entrepreneurial aspirations are primarily shaped by a unified educational and institutional support dimension rather than multiple distinct factors.
- The factor loading results confirm that entrepreneurial aspirations are explained by a single, unidimensional

construct related to educational and institutional support. All four variables load strongly on the extracted component, with factor loadings well above the acceptable threshold, indicating that each variable is a significant and reliable indicator of the underlying factor. Institutional curriculum emerges as the most influential element, as entrepreneurship-oriented courses show the highest loading, highlighting their central role in shaping students' entrepreneurial aspirations. Institutional support mechanisms and faculty guidance also demonstrate strong contributions, emphasizing the importance of practical infrastructure and mentorship in fostering entrepreneurial interest. Although slightly lower, the strong loading of educational background confirms that foundational education remains an essential contributor. Overall, the findings demonstrate that entrepreneurial aspirations are predominantly driven by a cohesive combination of curriculum design, institutional support, faculty involvement, and educational experience.

- The findings reveal that students' perceived challenges and barriers to entrepreneurship are dominated by a single underlying factor. Component 1, with an eigenvalue of 2.637, satisfies Kaiser's criterion and explains a substantial 65.914% of the total variance, indicating that the various perceived barriers are highly interrelated and collectively form a common dimension. The remaining components, despite accounting for additional variance, have eigenvalues below the acceptable threshold and therefore lack sufficient explanatory power for retention. The extraction of only one component confirms the unidimensional structure of perceived entrepreneurial challenges, suggesting that these barriers are best understood as a cohesive set of interrelated constraints rather than as multiple independent factors.
- The factor loading results indicate that perceived barriers to entrepreneurship are primarily driven by social, psychological, and skill-related factors. Family and social expectations emerge as the most influential barrier, followed closely by fear of failure, highlighting the strong impact of societal pressure and psychological risk perceptions on students' entrepreneurial intentions. Insufficient practical knowledge also loads strongly on the extracted component, emphasizing that lack of hands-on experience and applied skills significantly constrains students' willingness to pursue entrepreneurship. In contrast, financial constraints show a weak and negative association with the dominant factor, suggesting that access to finance is not a central or unifying barrier for students in this study and may represent a separate or less salient concern. Overall, the findings suggest that non-financial barriers—particularly social norms, fear of failure, and skill deficiencies—play a more critical role than financial limitations in shaping students' perceptions of entrepreneurial challenges.
- The regression results demonstrate a statistically significant and positive relationship between perceived challenges and barriers and the role of educational background and institutional support in shaping entrepreneurial aspirations. The significant constant indicates a meaningful baseline level of entrepreneurial aspirations even in the absence of perceived barriers. More importantly, the positive and substantial regression coefficient shows that as students' awareness of challenges and barriers increases, the influence of educational background and institutional support on their entrepreneurial aspirations becomes stronger. The moderately strong standardized effect confirms that perceived challenges are a key determinant in shaping how students rely on education and institutional mechanisms when considering entrepreneurship. Overall, the findings suggest that educational institutions play a crucial compensatory role, becoming increasingly important in supporting entrepreneurial aspirations as students encounter greater perceived obstacles.

15. SUGGESTIONS AND RECOMMENDATIONS

- Since institutional curriculum emerged as the most influential factor shaping entrepreneurial aspirations, higher education institutions should integrate entrepreneurship-focused courses across disciplines. These courses should emphasize opportunity recognition, innovation, business planning, and problem-solving to systematically build entrepreneurial mindsets among students.
- The strong role of institutional support highlights the need to expand and strengthen incubation centers, entrepreneurship cells, startup labs, and regular workshops. Providing structured platforms for idea development, mentoring, and startup experimentation can effectively translate entrepreneurial intentions into action.
- Faculty guidance significantly contributes to entrepreneurial aspirations. Institutions should encourage faculty-led mentorship programs, industry collaborations, and experiential teaching methods. Training faculty in entrepreneurship education can further enhance their capacity to motivate and guide aspiring student entrepreneurs.
- Given the dominance of family expectations and fear of failure as key barriers, institutions should implement awareness programs, counseling sessions, and success-story seminars to normalize entrepreneurial career paths. Creating a culture that views failure as a learning opportunity can reduce psychological resistance toward entrepreneurship.
- The strong influence of insufficient practical knowledge suggests the need for hands-on learning opportunities such as internships with startups, live projects, business simulations, and startup boot camps. These initiatives can reduce skill-related barriers and increase students' confidence in pursuing entrepreneurship.

16. CONCLUSION

The study on *"Entrepreneurial Aspirations of Arts and Science College Students in Rajapalayam: A Youth Perspective"* highlights the growing interest among students to explore entrepreneurship as a viable career option. The research reveals that educational background, exposure to entrepreneurship education, and institutional support play a significant role in shaping students' entrepreneurial mindset. Students who receive guidance, mentorship, and skill development opportunities show higher levels of aspiration toward starting their own ventures. At the same time, the study identifies several challenges and barriers, including lack of financial resources, fear of failure, limited practical experience, and social pressures, which can deter students from pursuing entrepreneurship. Addressing these obstacles through improved

institutional support, awareness programs, and financial assistance is essential to nurture entrepreneurial talent among youth. Overall, promoting entrepreneurship among college students not only empowers them to become self-reliant but also contributes to economic growth, innovation, and employment generation in the region.

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