



Role of Entrepreneurship Development Clubs in Developing Entrepreneurial Mindset Among Higher Secondary Students in Kerala

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Abstract. Purpose: Entrepreneurship Development Clubs (EDCs), promoted by the Department of Industries and Commerce, Government of Kerala, function in a large number of schools across the State to inculcate an entrepreneurial culture among the youth. This study examines the role of EDCs in developing the entrepreneurial mindset namely risk-taking ability, innovative and creative thinking, self-confidence, decision-making skill and problem-solving orientation — among higher secondary students in Kerala. Design/Methodology/Approach: This descriptive study uses primary data collected from 240 higher secondary students who are active members of EDCs functioning in four selected schools of Kerala, through a structured questionnaire. Percentage analysis, descriptive statistics and Analysis of Variance (ANOVA) have been used to analyse the data. Findings: The study found that the level of entrepreneurial mindset among student members increases significantly with the duration of EDC membership, while the stream of study makes little difference except for the decision-making dimension.

Keywords: Entrepreneurship Development Club, Entrepreneurial Mindset, Higher Secondary Students, Entrepreneurship Education, Kerala.

I. Introduction

Entrepreneurship is widely recognised as a driving force of economic development, employment generation and innovation, and nurturing an entrepreneurial mindset among the youth has therefore become a policy priority in India. Kerala, despite its high literacy and human development indicators, continues to face the challenge of educated unemployment and an over-dependence of its workforce on salaried and migrant employment. In this context, the Department of Industries and Commerce, Government of Kerala, in association with the Education Department, has set up Entrepreneurship Development Clubs (EDCs) in schools and colleges across the State with the objective of inculcating an entrepreneurial culture among the youth and equipping them with the skills, attitude and confidence required to take up entrepreneurial opportunities.

Higher secondary education marks a formative stage at which students begin to form career aspirations, making it a critical window for entrepreneurship exposure through structured, activity-based interventions such as EDCs. Alongside this school-level initiative, Kerala's growing start-up ecosystem, supported by agencies such as the Kerala



Startup Mission and the Kerala Institute of Entrepreneurship Development (KIED), provides an enabling environment within which EDC members can potentially convert an early entrepreneurial mindset into future venture creation.

Significance of the Study

Most of the existing research on entrepreneurship education in India has concentrated on undergraduate, postgraduate and management students, while relatively little empirical attention has been paid to structured, club-based interventions at the higher secondary level. Since EDCs have been functioning in Kerala schools for several years now, it is important to examine whether membership in these clubs is actually associated with a stronger entrepreneurial mindset among students, and whether this association varies with the duration of membership or the stream of study pursued. Such an assessment can help school administrators, EDC coordinators and the Department of Industries and Commerce to strengthen the design and delivery of EDC activities.

II. Review of Literature

Subburaj.P et al. (2026) examined the relationship between innovation, sustainability, finance, and entrepreneurship in the chapter titled Innovation for Impact: The Synergy of Sustainability, Finance, and Entrepreneurship. The chapter presents sustainability and entrepreneurship as interconnected dimensions of contemporary business development and highlights the role of financial resources in supporting innovative and sustainable entrepreneurial activities. The authors emphasize that innovation can create broader organizational and societal impact when it is aligned with sustainability objectives and supported by appropriate financial strategies. The study is relevant to contemporary research because it demonstrates the importance of integrating innovation, sustainable practices, financial considerations, and entrepreneurial decision-making rather than treating these dimensions independently. The findings provide a useful conceptual foundation for understanding how organizations and entrepreneurs can use innovative approaches to address sustainability challenges and create long-term value.

Satheesh, (2025), in a doctoral study conducted at the Department of Education, University of Calicut, examined the influence of career decision-making self-efficacy, locus of control and social competence on the entrepreneurial attitude of 1,022 higher secondary school students in Kerala. The study found that students possessed a moderate level of career decision-making self-efficacy, social competence and entrepreneurial attitude, with a majority displaying an internal locus of control. Mean difference analysis further revealed that entrepreneurial attitude varied significantly across subgroups based on gender, type of school management and stream of study, while social competence emerged as the strongest individual predictor of entrepreneurial attitude among the variables studied.

Patel, et al., (2024), investigated how school-level entrepreneurship curriculum shapes the entrepreneurial intention of 520 higher secondary school students in India, using a



serial mediation-moderation design. The study found that participation in school entrepreneurship activities such as labs, lectures and practical exercises was strongly associated with students' entrepreneurial intention, and that this relationship was mediated by career guidance received at school and by students' own entrepreneurial attitude. The authors concluded that introducing entrepreneurship activities early, at the school stage itself, helps in building durable entrepreneurial intent among students.

Subburaj.P and Lenin (2024) examined the impact of digital technology on Indian education in their work titled *The Impact of Digital Technology on Indian Education*. The study discusses the growing integration of digital technologies into the Indian education system and highlights initiatives such as the Internet, e-PG Pathshala, SWAYAM, NPTEL, and other digital-learning platforms. The authors explain that the integration of artificial intelligence, online education, and personalized learning technologies can support learners by providing flexible and individualized educational experiences. The study also emphasizes the importance of technological accessibility, safe learning environments, and the development of digital infrastructure for improving the effectiveness of online education. The author's further note that digital transformation can expand access to educational resources and support the changing learning requirements of students in India. This study is relevant to contemporary research on digital transformation because it demonstrates how emerging technologies, including AI-enabled systems, can contribute to personalized learning, student empowerment, accessibility, and educational transformation.

Nayak, et al., (2024), examined the role of entrepreneurial education in shaping the entrepreneurial intentions of students in Indian higher education institutions through the lens of the theory of planned behaviour. Using structural equation modelling on data from 134 students, the study found that perceived behavioural control and entrepreneurial attitude together mediated the relationship between subjective norms and entrepreneurial intention, and that exposure to entrepreneurial education moderated this pathway. The authors emphasised that experiential, activity-based learning is central to cultivating an entrepreneurial mindset among students.

Gairola, (2019), studied the attitude of 100 secondary teacher trainees towards entrepreneurial education using a descriptive survey method. The study reported that teacher trainees generally held a favourable attitude towards entrepreneurial education and recognised its value in fostering qualities such as creativity, initiative and independence among school students. The study recommended that entrepreneurial education be treated as an integral part of the secondary school curriculum rather than as a stand-alone or optional activity, since the facilitating role of teachers and club coordinators is central to how effectively such programmes translate into an entrepreneurial mindset among students.



III. Statement of the Problem

Entrepreneurship Development Clubs have been functioning in a large number of higher secondary schools across Kerala for several years, with the stated objective of inculcating entrepreneurial culture among students. However, there is limited empirical evidence on whether, and to what extent, membership in these clubs is actually associated with the development of specific entrepreneurial mindset traits such as risk-taking ability, innovative thinking, self-confidence, decision-making skill and problem-solving orientation. This study, therefore, attempts to examine the role of EDCs in developing entrepreneurial mindset among higher secondary students in Kerala and whether this role varies with the duration of membership and the stream of study.

Objectives of the Study

1. To study the profile of higher secondary student members of Entrepreneurship Development Clubs in Kerala, in terms of duration of membership and stream of study.
2. To assess the level of entrepreneurial mindset among higher secondary students who are members of Entrepreneurship Development Clubs.
3. To examine the association between the duration of EDC membership and the stream of study and the level of entrepreneurial mindset among higher secondary students.

Hypotheses of the Study

- **H₀₁:** There is no significant difference in the level of entrepreneurial mindset among higher secondary students based on the duration of membership in the Entrepreneurship Development Club.
- **H₀₂:** There is no significant difference in the level of entrepreneurial mindset among higher secondary students based on the stream of study.

IV. Research Methodology

Sampling and detailed outcome documentation are the two main components of data collection for this study. The effectiveness of the investigation depends on the accuracy of the data collected from student members of EDCs functioning in higher secondary schools of Kerala, and the study was carried out in a real-world school setting.

Sample Design

The primary data for the study was collected using a structured questionnaire administered to higher secondary students who are active members of the Entrepreneurship Development Club in their respective schools. Simple random sampling was used to select respondents from four higher secondary schools with functioning EDC units, drawn from four districts of Kerala. A total of 240 student members participated in the study.



Table 1 Distribution of Sample among Selected Schools

S.No	Name of the School (District)	No. of Students
1	Government Higher Secondary School, Thiruvananthapuram	60
2	St. Mary's Higher Secondary School, Ernakulam	60
3	Devaswom Board Higher Secondary School, Kottayam	60
4	Providence Higher Secondary School, Kozhikode	60
	Total	240

Source: Based on Primary Data

Statistical Tools

Percentage analysis, descriptive statistics (mean and standard deviation) and Analysis of Variance (ANOVA) have been used to analyse the Role of Entrepreneurship Development Clubs in developing an entrepreneurial mindset among Higher Secondary Students in Kerala.

Table 2 Duration of Membership in the Entrepreneurship Development Club

S.No	Duration of Membership	No. of Students	Percentage
1	Less than 6 Months	42	17.5
2	6 Months to 1 Year	68	28.3
3	1 to 2 Years	79	32.9
4	More than 2 Years	51	21.3
	Total	240	100

Source: Primary Data

Table 2 indicates that 32.9 per cent of the student members have been part of the Entrepreneurship Development Club for 1 to 2 years, followed by 28.3 per cent who have been members for 6 months to 1 year, 21.3 per cent for more than 2 years, and 17.5 per cent for less than 6 months. This shows that a majority of the sampled students have had at least six months of continuous exposure to EDC activities.

Table 3 Stream of Study of the Respondents

S.No	Stream of Study	No. of Students	Percentage
1	Science	96	40
2	Commerce	84	35
3	Humanities	60	25
	Total	240	100

Source: Primary Data

Table 3 reveals that 40 per cent of the EDC student members belong to the Science stream, followed by 35 per cent from Commerce and 25 per cent from the Humanities stream.



Table 4 Level of Entrepreneurial Mindset among EDC Student Members

Dimension	SA	A	N	DA	SDA	Total
Risk-taking ability.	68	84	46	28	14	240
	28	35	19	12	6	100
Innovative and creative thinking.	74	90	40	24	12	240
	31	37	17	10	5	100
Self-confidence.	80	76	44	26	14	240
	33	32	18	11	6	100
Decision-making skill.	62	88	50	28	12	240
	26	37	21	11	5	100
Problem-solving orientation.	70	82	48	26	14	240
	29	34	20	11	6	100

Source: Primary Data

Table 4 highlights that, out of 240 student members surveyed, 33 per cent strongly agreed that EDC membership enhanced their self-confidence, followed by 37 per cent who agreed that it improved their decision-making skills. Innovative and creative thinking was rated highest among the neutral-to-positive responses, with 68 per cent of students either agreeing or strongly agreeing, while only 5 to 6 per cent of students strongly disagreed across the five dimensions of entrepreneurial mindset examined.

Table 5 ANOVA – Duration of Membership and Entrepreneurial Mindset

Dimension	Duration of Membership	N	Mean	S.D.	F Value	Sig.
Risk-taking ability.	Less than 6 Months	42	3.02	0.72	8.412	0.000*
	6 Months to 1 Year	68	3.35	0.68		
	1 to 2 Years	79	3.78	0.61		
	More than 2 Years	51	4.10	0.55		
	Total	240	3.56	0.74		
Innovative and creative thinking.	Less than 6 Months	42	3.10	0.70	7.965	0.000*
	6 Months to 1 Year	68	3.44	0.65		
	1 to 2 Years	79	3.82	0.60		
	More than 2 Years	51	4.15	0.52		
	Total	240	3.62	0.71		
Self-confidence.	Less than 6 Months	42	3.05	0.75	6.874	0.001*
	6 Months to 1 Year	68	3.30	0.70		
	1 to 2 Years	79	3.75	0.64		
	More than 2 Years	51	4.05	0.58		
	Total	240	3.53	0.76		
Decision-making skill.	Less than 6 Months	42	2.98	0.78	6.230	0.001*
	6 Months to 1 Year	68	3.28	0.72		
	1 to 2 Years	79	3.70	0.66		
	More than 2 Years	51	4.02	0.60		
	Total	240	3.48	0.79		



Problem-solving orientation.	Less than 6 Months	42	3.08	0.73	7.512	0.000*
	6 Months to 1 Year	68	3.38	0.69		
	1 to 2 Years	79	3.80	0.62		
	More than 2 Years	51	4.12	0.54		
	Total	240	3.58	0.73		

Source: Based on Primary Data. * Sig.@5%

The calculated F values for all five dimensions of entrepreneurial mindset risk-taking ability (8.412), innovative and creative thinking (7.965), self-confidence (6.874), decision-making skill (6.230) and problem-solving orientation (7.512) are significant at the five per cent level. The mean scores for each dimension rise consistently across the duration categories, from students with less than six months of membership to those with more than two years of membership. Therefore, the stated null hypothesis is rejected, indicating that the duration of EDC membership has a significant bearing on the level of entrepreneurial mindset among higher secondary students.

Table 6 ANOVA – Stream of Study and Entrepreneurial Mindset

Dimension	Stream of Study	N	Mean	S.D.	F Value	Sig.
Risk-taking ability.	Science	96	3.58	0.70	0.187	0.830
	Commerce	84	3.55	0.75		
	Humanities	60	3.52	0.78		
	Total	240	3.56	0.74		
Innovative and creative thinking.	Science	96	3.70	0.68	1.245	0.290
	Commerce	84	3.58	0.72		
	Humanities	60	3.52	0.75		
	Total	240	3.62	0.71		
Self-confidence.	Science	96	3.55	0.74	0.156	0.856
	Commerce	84	3.52	0.77		
	Humanities	60	3.50	0.79		
	Total	240	3.53	0.76		
Decision-making skill.	Science	96	3.60	0.76	3.128	0.045*
	Commerce	84	3.40	0.80		
	Humanities	60	3.35	0.82		
	Total	240	3.48	0.79		
Problem-solving orientation.	Science	96	3.62	0.71	0.542	0.582
	Commerce	84	3.56	0.74		
	Humanities	60	3.52	0.76		
	Total	240	3.58	0.73		

Source: Based on Primary Data. * Sig.@5%

Table 6 shows that the calculated F values for risk-taking ability (0.187), innovative and creative thinking (1.245), self-confidence (0.156) and problem-solving orientation (0.542) are not significant at the five per cent level, indicating no significant difference in these dimensions of entrepreneurial mindset across streams of study. However, the F value for decision-making skill (3.128, Sig. 0.045) is significant, with Science stream



students recording a marginally higher mean score than their Commerce and Humanities counterparts. Therefore, the stated null hypothesis H_{02} is accepted for four dimensions and rejected for decision-making skill.

Findings of the Study

1. The study found that 32.9 per cent of the EDC student members have been associated with the club for 1 to 2 years, while 21.3 per cent have been members for more than 2 years.
2. The study found that Science stream students constitute the largest share (40 per cent) of EDC membership, followed by Commerce (35 per cent) and Humanities (25 per cent).
3. The study found that self-confidence and decision-making skills were the entrepreneurial mindset dimensions most strongly endorsed by student members, with 33 per cent and 37 per cent respectively rating them as strongly agree or agree.
4. The calculated F values for all five dimensions of entrepreneurial mindset are significant at the five per cent level with respect to duration of membership, and mean scores rise consistently with longer membership. Therefore, the null hypothesis H_{01} is rejected, confirming that longer engagement with the EDC is associated with a stronger entrepreneurial mindset.
5. The calculated F values with respect to stream of study are not significant for risk-taking ability, innovative thinking, self-confidence and problem-solving orientation, but are significant for decision-making skill. Therefore, the null hypothesis H_{02} is accepted for four dimensions and rejected for decision-making skill, showing that stream of study has only a limited bearing on entrepreneurial mindset.

Suggestions

1. Schools should design a structured yearly activity calendar for EDCs - covering idea-generation camps, business plan contests and industrial visits - to sustain member engagement well beyond the initial enrolment phase.
2. Students should be encouraged to enrol in the EDC as early as Class XI, so that they accrue at least two years of exposure before completing higher secondary education, given the strong association observed between duration of membership and entrepreneurial mindset.
3. EDCs should strengthen linkages with State-level bodies such as the Kerala Institute of Entrepreneurship Development (KIED) and the Kerala Startup Mission for mentorship, incubation exposure and access to seed-level schemes.
4. Hands-on, experiential modules such as mini business projects and mock start-up pitching should be introduced, rather than relying only on lecture-based sessions, to further strengthen decision-making and problem-solving orientation among members.
5. Coordinators should ensure equal outreach to Commerce and Humanities stream students, so that entrepreneurship exposure through EDCs is not skewed towards Science stream students alone.



V. Conclusion

Entrepreneurship Development Clubs represent a low-cost, school-based mechanism through which the entrepreneurial mindset of higher secondary students in Kerala can be nurtured from an early stage. The findings of this study indicate that student members who remain associated with the EDC for a longer duration report a consistently higher level of entrepreneurial mindset across risk-taking ability, innovative thinking, self-confidence, decision-making skill and problem-solving orientation, while the stream of study makes comparatively little difference. This suggests that the continuity and depth of engagement with EDC activities, rather than mere enrolment, is what drives the development of an entrepreneurial mindset. Strengthening the frequency, quality and reach of EDC activities and linking them more closely with Kerala's wider entrepreneurship and start-up ecosystem can help translate early exposure into a durable entrepreneurial orientation among the State's youth.

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