

Role of Incubation Centers in Educational Institutions in Motivating Start-up Entrepreneurs: An Empirical Investigation of B-School Graduates

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Abstract

Incubation centres located within educational institutions are a vital source of motivation for budding entrepreneurs, particularly those who have graduated from B-Schools, since they offer a fostering environment conducive to idea development and business growth. For aspiring business owners, these centres provide access to crucial services like shared office spaces, networking events, funding options, and mentorship. Additionally, they promote innovation and creativity by facilitating knowledge exchange and collaboration between students, instructors, and professionals in the field. Graduates are empowered to turn their company ideas into successful companies by incubation centres, which provide hands-on training, workshops, and coaching on many facets of entrepreneurship. Additionally, entrepreneurs' drive and confidence are boosted by the reinforcement and recognition they receive from these programmes, which inspires them to fervently pursue their entrepreneurial goals. In general, by giving B-School graduates the required assistance and encouragement when they set out on their business path, incubation centres act as accelerators for entrepreneurial success. A sample of 271 respondents was collected. The variables that identify the Role of Incubation Centers in Educational Institutions in Motivating Start-up Entrepreneurs are Skill Enhancement, Networking Opportunities, Encouraging Innovations, and Entrepreneurial Mindset.

Keywords: Incubation centres, Educational institutions, Entrepreneurship, B-School graduates, Idea development, Business growth, Mentorship, Networking.

Introduction

The transition from academia to entrepreneurship can be challenging, particularly for recent B-School graduates who must navigate the challenges of launching their own businesses. Nonetheless, incubation centres show up in the educational environment as a source of inspiration and support for would-be startup founders. These facilities function as vibrant hubs where connections are made, abilities are refined, and ideas are fostered. They provide the crucial support system for entrepreneurship success by providing a variety of resources, such as funding opportunities and mentorship. In the start, the critical role that incubation centres play in enabling B-School graduates is examined. Specifically, it looks at how these centres inspire, mentor, and help the upcoming generation of business leaders realise their aspirations to become entrepreneurs. According to Lakshmi et al. (2023), "experiential learning technologies" have been emphasised for their role in building student learning environments that support creative entrepreneurship. These technologies, which included interactive workshops and immersive simulations, gave B-School graduates real experience and the "innovative mindsets" and "practical skills" necessary for business success. Through the use of real-world scenarios, these instructional strategies promoted an entrepreneurial culture in academic settings, encouraging graduates to confidently investigate and pursue their company ideas.

According to Adhana (2020), university business incubators were essential in fostering India's startup scene. By offering prospective business owners, especially B-School graduates, a nurturing environment and vital tools, these incubators acted as catalysts for the growth of the entrepreneurial community. With the help of "mentorship programmes," "funding opportunities," and "networking events," graduates were able to turn their company concepts into successful businesses. University business incubators provide a supportive atmosphere that not only inspires graduates to take the risk of starting their own business, but also adds to the nation's startup ecosystem's general vitality and sustainability.

With regard to technology startups in particular, Trivedi and Asrani (2019) provide understanding of the elements affecting the efficacy of Indian business incubation centres. They stressed how crucial it is for these centres to offer infrastructure and support services that are specifically designed to meet the demands of B-School graduates entering the IT sector. Graduates were inspired and equipped to confront the difficulties of beginning a business with resiliency and commitment thanks to "specialised programmes," industry connections, and "mentorship" catered to the needs of technology-driven enterprises. Incubation centres were essential in assisting B-School graduates to fulfil their dreams of becoming entrepreneurs and make a valuable contribution to the nation's innovation ecosystem by offering the required assistance and mentoring. With the provision of vital resources and direction, incubation centres housed within academic institutions are an invaluable resource for budding entrepreneurs, especially those who have graduated from business schools. Through networking events, funding opportunities, and mentorship programmes, these centres create an environment that is favourable for the growth and innovation of entrepreneurship. With the help of incubation centres, graduates can confidently pursue their startup companies by gaining real-world experience and cultivating an entrepreneurial mindset. These hubs act as stimulants for the growth of startups and the economy by fostering an environment that is conducive to entrepreneurial success.

Literature Review

Loganathan and Bala Subrahmanya (2022) concentrated on the technological accomplishments of entrepreneurs created in university-based incubators, mostly in the Indian context. They elucidated the noteworthy function that these incubators fulfil in cultivating technological innovation and propelling startup venture achievement. Incubation centres gave businesses the tools they needed to succeed in a cutthroat environment by giving them access to cutting-edge resources, such as modern facilities and technological infrastructure. Furthermore, "mentorship" programmes made it possible for B-School graduates to gain from the experience and advice of seasoned professionals, empowering them to overcome obstacles and make wise decisions. Furthermore, networking opportunities enabled the entrepreneurs to establish connections with industry experts, possible collaborators, and investors, so broadening their reach and improving their chances of growth and scalability. In general, the nurturing atmosphere established by incubation centres has been crucial in stimulating the expansion and advancement of startups, enabling recent graduates of business schools to materialise their entrepreneurial dreams.

Nagayya and Rao (2017) stressed the significance of entrepreneurship development as a calculated tactic to promote economic growth and innovation. Incubation centres enabled recent graduates of B-Schools to develop their entrepreneurial mentality and skill set through customised programmes and activities. These centres advanced the overall development of entrepreneurial potential by fostering creativity, resilience, and strategic thinking. As a result, graduates were better prepared to meet the difficulties of starting and growing a business. Economic advancement and innovation were greatly aided by this B-School graduating community's development of an entrepreneurial attitude and aptitude. Soam et al. (2023) also investigated students' viewpoints on entrepreneurship and its purpose in India, offering insightful information about the drives and goals of prospective business owners. They emphasised how education shapes students' attitudes towards business and helps them develop an entrepreneurial mindset. B-School incubation centres were important in converting these dreams into real business endeavours by offering the required resources, assistance, and direction. These centres enabled B-School graduates to follow their entrepreneurial goals with zeal and tenacity by fostering networking opportunities, imparting practical skills, and building confidence. As a result, they ultimately enhanced the vibrancy and expansion of the startup ecosystem.

According to Surana et al. (2020), "strengthening science, technology, and innovation-based incubators" is crucial to achieving the Sustainable Development Goals. They emphasised how incubation centres may stimulate innovation and address societal concerns in a way that can be revolutionary. These centres allowed B-School graduates to create sustainable

business solutions that aided in social and economic development by giving them access to resources and a supportive ecosystem. Additionally, Kiran and Bose (2020) emphasised the role that "networking, university linkage, and facilities" have in boosting the effectiveness of company incubation. By means of tactical partnerships and academic resources, incubation centres augmented the capacity of B-School graduates to establish prosperous enterprises. These centres provided information sharing and market access by connecting graduates with investors, industry experts, and mentors. This helped graduates become resilient and confident in their ability to traverse the complicated world of entrepreneurship.

Aithal and Aithal (2023) also promoted the development of business executives via incubation ships as a means of fostering super innovation in research universities. They emphasised the way incubation centres may change the lives of B-School graduates by developing their entrepreneurial potential and encouraging an innovative culture. These facilities enabled graduates to realise their full creative potential and take on innovative endeavours by offering mentorship, instruction, and chances for hands-on learning. B-School alumni gained the networks, expertise, and resources necessary to succeed as business owners and contribute significantly to society with the help of incubation centres. A thorough "New Venture Incubation Framework," especially designed for the Indian academic context, was given by Subrahmanya and Gopalaswamy (2018). This framework provided a road map for prospective entrepreneurs to navigate the intricacies of entrepreneurship by outlining the crucial elements required to support startup businesses within academic environments. These incubation centres were crucial in encouraging recent B-School graduates to turn their creative ideas into successful businesses by providing advice, mentorship, and access to resources including funding chances and networking opportunities.

Mishra et al. (2021) carried out a preliminary investigation on the "Reasons and Challenges" that Indian higher education institutions' student body faces when they choose to pursue entrepreneurship. views and obstacles faced by B-School alums, emphasising the function of incubation centres in resolving these issues. Incubation centres enable graduates to overcome challenges and confidently pursue their entrepreneurial goals by offering a supportive environment and workable ways to alleviate impediments, like a lack of capital or mentorship. The graduates were not only encouraged to establish their own businesses but also became more resilient and determined to succeed in the cutthroat business world thanks to this personalised support.

Shekhar et al. (2023) looked at the "Role and contributions of an incubator in academic entrepreneurship," highlighting how crucial it is to support innovation and entrepreneurial abilities at academic institutions. Incubation centres enabled B-School graduates to develop entrepreneurial competencies by giving them access to industry connections, specialised programmes, and mentorship opportunities. The emphasis on entrepreneurship enabled graduates to use their imagination and propel innovation in well-established companies, ultimately fostering individual and organisational development. To put it briefly, incubation centres were crucial in encouraging and enabling recent graduates of business schools to engage in entrepreneurial activities, which in turn stimulated economic growth and innovation.

The provision of critical skills and attitudes by incubation centres within academic institutions was crucial in enabling B-School graduates to pursue entrepreneurship. Using an emphasis on the influence of "knowledge," "skills," and "attitude" on the establishment of new ventures, Acharya and Chandra (2019) examined how entrepreneurial skills may be acquired through schooling. As to their evaluation, incubation centres are crucial for giving B-School graduates the right atmosphere to acquire these vital skills. Incubation centres gave graduates the skills and mindset they needed to start their own businesses with competence and confidence by providing them with experience learning opportunities, mentorship, and specialised training programmes.

Kummitha and Kummitha (2021) looked at the motivational elements that propelled would-be business owners as they studied sustainable entrepreneurship training. They emphasised how incubation centres aid in the promotion of sustainable entrepreneurship by encouraging B-School graduates to take up projects that have a good impact on society and the environment. These centres helped graduates create a sense of purpose and dedication by offering them specialised training and mentoring programmes. This gave them the ability to launch businesses that help achieve sustainable development objectives. B-School alumni were inspired to overcome obstacles and make significant contributions to society through their entrepreneurial endeavours by incubation centres, which fostered a sense of purpose and enthusiasm for societal change.

Sharma and Vohra (2021) focused on the ecosystem for business incubation in India, providing insights into the several elements impacting startup motivation in this setting. The diverse functions of incubation centres in offering assistance at various levels, such as resource access, networking opportunities, and policy advocacy, were emphasised by them. Incubation centres produced an environment that allowed B-School graduates to flourish by promoting a cooperative ecology that encouraged innovation and entrepreneurship. By offering the resources and networks needed to successfully traverse the entrepreneurial landscape, this encouraging environment not only encouraged graduates to pursue their company ideas but also increased their chances of success.

Objective

To identify Role of Incubation Centers in Educational Institutions in Motivating Start-up Entrepreneurs.

Study’s Methodology

271 respondents are considered for this study which was collected from participants of different educational institutions. For collection of data, Random sampling method, and examined by “Explanatory Factor Analysis” for outcome.

Study’s findings

Below table is about general details of respondents which shows that 58.30%, and 41.70% are female participants. Regarding age of the respondents, 29.15% are between 22 to 26 years, 33.58% are 26 to 28 years, and 37.27% are above 28 years of age. About Education Level, Graduation level is 34.32%, post-graduation level is 33.21%, and Professional level is 32.47%.

Details of Participants

Variable	Participants	% age
Gender		
Male	158	58.30
Female	113	41.70
Total	271	100
Age in years		
22 to 26	79	29.15
26 to 28	91	33.58
Above 28	101	37.27
Total	271	100
Educational Level		
Graduation level	93	34.32
Post - graduation level	90	33.21
Professional level	88	32.47
Total	271	100

“Factor Analysis”

“KMO and Bartlett's Test”

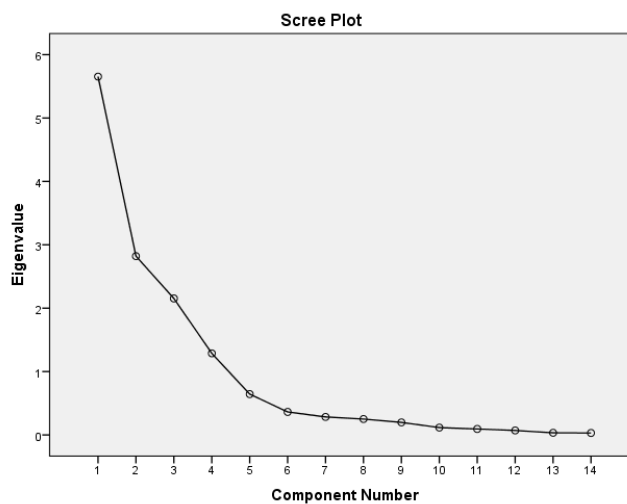
“Kaiser-Meyer-Olkin Measure of Sampling Adequacy”		.800
“Bartlett's Test of Sphericity”	“Approx. Chi-Square”	4226.806
	df	91
	Significance	.000

In above table “KMO and Bartlett's Test” above, KMO value found is .800

“Total Variance Explained”

“Component”	“Initial Eigenvalues”			“Rotation Sums of Squared Loadings”		
	“Total”	“% Of Variance”	Cumulative %	“Total”	“% Of Variance”	Cumulative %
1.	5.654	40.385	40.385	3.754	26.813	26.813
2.	2.821	20.149	60.533	3.625	25.896	52.709
3.	2.154	15.383	75.916	2.392	17.088	69.797
4.	1.288	9.197	85.112	2.144	15.316	85.112
5.	.644	4.600	89.712			
6.	.363	2.593	92.305			
7.	.284	2.028	94.333			
8.	.251	1.790	96.123			
9.	.198	1.414	97.537			
10.	.116	.830	98.367			
11.	.094	.674	99.040			
12.	.070	.502	99.543			
13.	.033	.239	99.782			
14.	.031	.218	100.000			

All the four factors are making contribution in explaining total 85.112% of variance. The variance explained by Skill Enhancement is 26.813%, Networking Opportunities is 25.896%, Encouraging Innovations is 17.088%, and Entrepreneurial Mindset is 15.316%.



ScreePlot

“Rotated Component Matrix”

S. No.	Statements	Factor Loading	Factor Reliability
	Skill Enhancement		.978
1.	These are fertile grounds for learning, and incubation centers to enhance the entrepreneurial skills	.961	

2.	Workshops, training programs, and events organized equip students with the necessary knowledge	.947	
3.	Centers help students in business planning, marketing, finance, and project management	.947	
4.	Incubation centers enabled B-Schools to develop their entrepreneurial mentality and skill set	.935	
	Networking Opportunities		.962
1.	Partnerships with professionals, investors, and alumni, it creates networking opportunities	.970	
2.	Connections can be invaluable for gaining insights, securing funding, and establishing collaborations	.942	
3.	Diverse functions offer assistance at various levels like resource access, and networking opportunities	.925	
4.	Offer a blend of networking, tools, mentorship, and assistance to create the ideal environment	.884	
	Encouraging Innovations		.881
1.	Encourage a culture of innovation by providing a platform for students to explore their creative ideas	.884	
2.	It led to the development of new products, services, or solutions with potential to turn into viable business	.835	
3.	Promotes innovation and creativity by facilitating knowledge exchange between students, and professionals	.832	
	Entrepreneurial Mindset		.783
1.	Students can confidently pursue startup companies by gaining real-world experience and cultivate entrepreneurial mindset	.894	
2.	Foster an entrepreneurial mindset by promoting a risk-taking attitude and continuous learning approach	.784	
3.	These attributes are essential for individuals looking to navigate the uncertainties of the business world	.763	

Factors and the associated variables

The first factor of the study is Skill Enhancement that includes variables like These are fertile grounds for learning, and incubation centers to enhance the entrepreneurial skills, Workshops, training programs, and events organized equip students with the necessary knowledge, Centers help students in business planning, marketing, finance, and project management, and Incubation centers enabled B-Schools to develop their entrepreneurial mentality and skill set. The second factor is Networking Opportunities including variables like Partnerships with professionals, investors, and alumni, it creates networking opportunities, Connections can be invaluable for gaining insights, securing funding, and establishing collaborations, Diverse functions offer assistance at various levels like resource access, and networking opportunities and offer a blend of networking, tools, mentorship, and assistance to create the ideal environment. Encouraging Innovations is the third factor which includes variables like Encourage a culture of innovation by providing a platform for students to explore their creative ideas, it led to the development of new products, services, or solutions with potential to turn into viable business, and Promotes innovation and creativity by facilitating knowledge exchange between students, and professionals. Entrepreneurial Mindset is last and fourth factor with variables like Students can confidently pursue startup companies by gaining real-world experience and cultivate entrepreneurial mindset, foster an entrepreneurial mindset by promoting a risk-taking attitude and continuous learning approach, and These attributes are essential for individuals looking to navigate the uncertainties of the business world.

“Reliability Statistics”

“Cronbach's Alpha”	“Number of Items”
.879	14

Total reliability of 14 items including variables for Role of Incubation Centers in Educational Institutions in Motivating Start-up Entrepreneurs is 0.879

Conclusion

In conclusion, the existence of incubation centres greatly increases the motivation of B-School graduates to pursue startup endeavours and gives them a sense of empowerment. These hubs act as nourishing environments where innovative concepts are fostered, encouraged, and developed into successful commercial endeavours. Incubation centres offer a blend of networking opportunities, tools, mentorship, and hands-on assistance to create the ideal environment for aspiring business owners to succeed. Mentorship is essential in helping B-School graduates develop their talents and mindset. Expert mentors offer priceless advice, assisting business owners in overcoming obstacles, improving their business plans, and coming to wise judgements. In addition to improving the calibre of startup ideas, this individualised support gives entrepreneurs resilience and self-assurance, inspiring them to go all out in their business endeavours. A key factor in helping businesses get past their initial obstacles is having access to the resources provided by incubation centres. These centres offer vital resources that lower entry barriers and free up entrepreneurs to concentrate on innovation and growth, from financial support to physical infrastructure. Furthermore, the availability of state-of-the-art research facilities and technology gives entrepreneurs the advantage they need to compete in the ever-changing business environment of today. Incubation centres also act as energetic hubs for networking and cooperation, bringing together business owners and like-minded people as well as industry professionals, investors, and possible clients. Startups' growth trajectory is fueled by these networking possibilities, which not only promote knowledge sharing and idea exchange but also offer doors to funding and partnering opportunities. Essentially, incubation centres are what propel business success through igniting the ambitions of recent B-School graduates and converting creative ideas into profitable ventures. These centres equip entrepreneurs with the tools they need to overcome obstacles, grab opportunities, and significantly boost the economy by offering a supportive atmosphere, networking opportunities, mentorship, and resources. The significance of incubation centres in promoting innovation, propelling economic growth, and influencing the direction of company will not change as the entrepreneurial landscape does. The variables that identify the Role of Incubation Centers in Educational Institutions in Motivating Start-up Entrepreneurs are Skill Enhancement, Networking Opportunities, Encouraging Innovations, and Entrepreneurial Mindset.

References

1. Acharya, S. R., & Chandra, Y. (2019). Entrepreneurship skills acquisition through education: impact of the nurturance of knowledge, skills, and attitude on new venture creation. *International Journal of Education and Pedagogical Sciences*, 13(2).
2. Adhana, D. (2020). Start-up ecosystem in India: A study with focus on entrepreneurship and university business incubators. Available at SSRN 3702510.
3. Aithal, P. S., & Aithal, S. (2023). Super Innovation in Higher Education by Nurturing Business Leaders through Incubationship. *International Journal of Applied Engineering and Management Letters (IJAEML)*, 7(3), 142-167.
4. Kiran, R., & Bose, S. C. (2020). Stimulating business incubation performance: Role of networking, university linkage and facilities. *Technology Analysis & Strategic Management*, 32(12), 1407-1421.
5. Kummitha, H. R., & Kummitha, R. K. R. (2021). Sustainable entrepreneurship training: A study of motivational factors. *The International Journal of Management Education*, 19(1), 100449.
6. Lakshmi, D. V., Saradha, M., Karthik, R., Kumar, S., Babu, J. C., & Vilcekova, L. (2023). Parameters Describing Student Learning Environments Through Experiential Learning Technologies for Entrepreneurial Creativity: A Study From a B School. *Journal of Cases on Information Technology (JCIT)*, 25(1), 1-15.
7. Loganathan, M., & Bala Subrahmanya, M. H. (2022). Technological outcome achievements by start-ups at university-based incubators: an empirical analysis in the Indian context. *Technology Analysis & Strategic Management*, 34(9), 1004-1019.

8. Mishra, G., Puri, N., & Gupta, S. (2021). Reasons and Challenges in Context of Entrepreneurship: An Exploratory Study of Student's Perception in Higher Education Institutions in India. *Journal of Entrepreneurship & Management*, 10.
9. Nagayya, D., & Rao, B. A. (2017). Entrepreneurship Development: A New Strategy. *IUP Journal of Entrepreneurship Development*, 14(1).
10. Shekhar, H., Satyanarayana, K., & Chandrashekar, D. (2023). Role and contributions of an incubator in academic intrapreneurship—An examination. *Technovation*, 126, 102821.
11. Sharma, S., & Vohra, N. (2021). 15. Indian business incubation ecosystem: a multilevel analysis. *Handbook of Research on Business and Technology Incubation and Acceleration: A Global Perspective*, 260.
12. Soam, S. K., Rathore, S., Yashavanth, B. S., Dhumentarao, T. R., & Balasani, R. (2023). Students' Perspectives on Entrepreneurship and Its Intention in India. *Sustainability*, 15(13), 10488.
13. Surana, K., Singh, A., & Sagar, A. D. (2020). Strengthening science, technology, and innovation-based incubators to help achieve Sustainable Development Goals: Lessons from India. *Technological Forecasting and Social Change*, 157, 120057.
14. Subrahmanya, M. H., & Gopaldaswamy, A. K. (2018). New Venture Incubation Framework: An Indian Academic Model. *Asian Journal of Innovation & Policy*, 7(3).
15. Trivedi, H., & Asrani, R. (2019). An Analysis of factors affecting the effectiveness for Indian Business Incubation Centers with respect to Technology Startups. *Think India Journal*, 22(10), 2200-2207.