

The Effect of Entrepreneurship Education and Government Support on Start-Up Growth in Bogor

Ruby Galuh Septino

Universitas Ipwija and <u>ruby.galuh@gmail.com</u>

Coresponding Author: ruby.galuh@gmail.com

ARTICLE HISTORY

Received August 2024

Revised October 2024

Accepted October 2024

ABSTRACT

This study investigates the effect of entrepreneurship education and government support on the growth of start-up businesses in Bogor, Indonesia. Using a quantitative research design, data was collected from 50 start-up entrepreneurs through a structured questionnaire and analyzed using SPSS version 25. The results reveal that both entrepreneurship education and government support have a positive and significant impact on start-up growth. Entrepreneurship education, in particular, plays a more prominent role in fostering business growth by equipping entrepreneurs with the necessary skills and knowledge to manage and expand their ventures. Government support, while significant, offers external resources that complement the internal capabilities developed through education. These findings highlight the importance of an integrated approach, where educational programs and government policies work together to support start-up development. The study concludes with recommendations for enhancing entrepreneurship education and optimizing government support to promote start-up growth in emerging markets.

Keywords: Start-up growth, Entrepreneurship education, Government support, Bogor.

INTRODUCTION

The growth of start-ups in Indonesia, especially in Bogor, significantly drives economic development, innovation, and employment. Key factors such as entrepreneurship education, government support, and venture capital shape this expansion. Start-up success and sustainability, particularly those that survive beyond early stages, contribute greatly to regional development by creating jobs [1], [2]. High-quality start-ups are crucial for economic progress, making policies that support quality entrepreneurship essential [2], [3]. Entrepreneurs drive economic transformation by fostering innovation and employment [4], [5], and in developing countries, they offer social and economic benefits [6], [7]. Government support and venture capital further enhance start-up growth through funding, mentorship, and access to markets [8], [9].

Entrepreneurship education is vital for equipping individuals with the skills and mindset necessary to navigate the business landscape, fostering the ability to identify opportunities, innovate, and manage business operations effectively, thus promoting start-up growth and sustainability. Research highlights the varying impact of educational approaches, with incubation programs significantly increasing new venture creation, sales revenue, and employment, while theory education and business plan competitions mainly benefit non-management majors[10], [11]. Universities implement diverse practices such as experiential learning, case studies, and simulations to build resilience, especially during crises like the COVID-19 pandemic [12]. Entrepreneurship education also contributes to socio-economic development, addressing issues like unemployment in regions facing economic challenges, as seen in Nigeria[13]. Additionally, creating an enabling

ecosystem within educational institutions supports startup projects by fostering innovative business models, team formation, and venture investments, driving regional economic growth [14].

In addition to education, government support is another significant factor that can enhance the growth prospects of start-ups. Governments often implement policies, provide financial assistance, and create regulatory frameworks that encourage the development of new businesses. In the context of Indonesia, various government initiatives, such as funding programs, training workshops, and tax incentives, have been introduced to support the entrepreneurial ecosystem. However, the extent to which these efforts directly impact start-up growth remains an area of interest for further investigation. This study seeks to explore the combined effect of entrepreneurship education and government support on the growth of start-up businesses in Bogor. By examining these factors, this research aims to provide insights into how education and policy interventions can contribute to the success of new ventures.

LITERATURE REVIEW

Entrepreneurship Education

Entrepreneurship education is a structured process that imparts entrepreneurial knowledge, skills, and attitudes to individuals interested in business ventures. According to [15], [16], such education enhances students' ability to recognize opportunities, manage risks, and execute business ideas. Numerous studies have demonstrated the positive relationship between entrepreneurship education and new venture success. [17], [18] found that entrepreneurship education significantly increases participants' entrepreneurial intentions and competencies, while [19] noted that entrepreneurship programs develop critical business skills like financial planning, innovation, and marketing strategies, essential for start-up growth. In Indonesia, universities and vocational training programs have integrated entrepreneurial competencies are vital for building self-sustained businesses. However, the effectiveness of these programs depends on the quality of instruction, resources, and curriculum alignment with real-world challenges [15], [17], [19]. This study aims to investigate whether entrepreneurship education in Bogor positively impacts start-up growth.

Government Support

Government support plays a crucial role in fostering the entrepreneurial ecosystem, particularly in emerging economies like Indonesia. This support comes in various forms, such as financial aid, training programs, regulatory frameworks, and infrastructure development. According to the resource-based view (RBV) theory, access to essential resources, including government support, is vital for business survival and growth [20], [21]. Governments can promote start-up growth by providing funding, offering tax incentives, and creating a conducive business environment through favorable policies and regulations [22], [23]. Empirical studies show that government initiatives significantly impact new business formation and expansion. For instance, [20], [22] found that start-ups receiving government financial support are more likely to survive and grow in their early stages. [20], [21], [24] also emphasize the importance of a supportive regulatory environment in encouraging entrepreneurship. In Indonesia, the government supports start-ups through initiatives such as financial grants, subsidized loans, and entrepreneural training programs

[23][24], but the specific impact of these measures on start-up growth in Bogor remains underexplored.

Start-Up Growth

Start-up growth, a common measure of business success, refers to increases in various dimensions such as revenue, customer base, market share, and employment [25], [26], and is often seen as a key indicator of long-term sustainability. Factors influencing start-up growth include access to capital, market opportunities, human resource capabilities, and entrepreneurial experience [27]. External elements like government support and quality entrepreneurial education also play a crucial role in determining the growth trajectory of new ventures [28]. Research has shown that a strong support network and solid educational background significantly influence early-stage business growth, especially in developing countries where resource constraints and regulatory challenges are common [29]. In Indonesia, start-ups benefit from a mix of government support and entrepreneurial training programs[25], [26], [27]. However, the specific relationship between these factors and start-up growth in Bogor remains underexplored, which this research aims to address.

Theoretical Framework

This study adopts the Theory of Planned Behavior (TPB) as its theoretical underpinning. The TPB suggests that an individual's behavior is shaped by their attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). In the context of entrepreneurship, this theory implies that education and government support can influence an entrepreneur's intentions and ability to grow their business. Entrepreneurship education enhances knowledge and skills (attitudes), while government support provides external resources and opportunities (perceived behavioral control) that empower entrepreneurs to pursue business growth. Thus, this study investigates how these two factors collectively contribute to the growth of start-up businesses in Bogor.

Based on the reviewed literature, two primary hypotheses are developed for this study:

H1: Entrepreneurship education has a positive and significant effect on start-up growth in Bogor.

H2: Government support has a positive and significant effect on start-up growth in Bogor.

METHODS

Research Design

This study adopts a quantitative research design to examine the relationships between entrepreneurship education, government support, and start-up growth. A cross-sectional survey method was utilized to collect data from start-up entrepreneurs in Bogor at a single point in time. The rationale for choosing this design is that it allows for the collection of quantifiable data that can be analyzed statistically to determine the strength and direction of the relationships between the variables. Moreover, a quantitative approach is suitable for testing the proposed hypotheses, as it enables a clear measurement of the impact of the independent variables on the dependent variable.

Population and Sample

The population for this study consists of start-up businesses operating in Bogor. Given the nature of start-ups, which often have varying characteristics in terms of size, industry, and growth stage, the sample was selected based on specific inclusion criteria. To be included in the study, a

start-up must have been in operation for at least one year and have fewer than 50 employees. These criteria ensure that the selected businesses have had sufficient time to be influenced by factors such as education and government support, while still maintaining the characteristics of a start-up. A total of 50 start-up businesses were selected using purposive sampling, a non-probability sampling technique that allows the researcher to select participants who meet the defined criteria and are most likely to provide relevant data for the research objectives. This sample size is deemed appropriate for the scope of this study, allowing for a robust analysis while considering the logistical constraints of surveying small businesses.

Data Collection Method

Data was collected through a structured questionnaire, which was distributed to the owners or key decision-makers of the selected start-up businesses. The questionnaire was designed to capture information on entrepreneurship education, government support, and start-up growth. To ensure reliability and validity, the questionnaire was pre-tested with a small group of entrepreneurs who were not part of the final sample. Feedback from the pre-test was used to refine the wording and structure of the questionnaire. Each item was rated on a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). This scale was chosen for its simplicity and effectiveness in capturing respondents' perceptions and experiences related to the variables under study.

Research Instrument

The main instrument used in this study is the structured questionnaire. The development of the questionnaire was based on previous literature and established measures to ensure that the constructs of entrepreneurship education, government support, and start-up growth were accurately represented. The scales for entrepreneurship education were adapted from Sánchez (2013), while the scales for government support were adapted from Kolvereid and Isaksen (2006). The growth of start-ups was measured using scales developed by Wiklund and Shepherd (2003), which focus on financial and operational indicators of business growth.

Data Analysis

After data collection, responses were entered into SPSS version 25 for analysis, which included several stages. First, descriptive statistics summarized respondent demographics, such as start-up age, number of employees, and industry sectors. Second, reliability testing using Cronbach's alpha ensured the internal consistency of the research instrument. Third, Pearson correlation analysis examined the relationships between entrepreneurship education, government support, and start-up growth. Fourth, multiple regression analysis tested hypotheses and assessed the predictive power of the independent variables on start-up growth. Finally, hypothesis testing was conducted with a significance level set at p < 0.05 to determine statistical significance.

RESULTS AND DISCUSSION

Descriptive Statistics

Table 1 summarizes the demographic characteristics of the respondents. The majority of the start-ups in the sample had been operating for 1 to 3 years (60%), followed by those operating for 3 to 5 years (30%), and a small proportion with more than 5 years of operation (10%). Most businesses employed fewer than 10 employees (70%), while the remaining 30% had between 10 and 50 employees. These results suggest that the sample mainly consists of early-stage start-ups.

Table 1. Descriptive Statistics						
Category	Frequency	Percentage (%)				
1-3 years	30	60%				
3-5 years	15	30%				
	Category 1-3 years	CategoryFrequency1-3 years30				

	More than 5 years	5	10%
Number of Employees	Fewer than 10	35	70%
	10-50 employees	15	30%

Source: data analysis, 2024

Reliability Test

The reliability of the scales measuring entrepreneurship education, government support, and start-up growth was assessed using Cronbach's alpha, and all scales demonstrated acceptable reliability, with values above the 0.70 threshold. Specifically, the Cronbach's alpha values were 0.835 for entrepreneurship education, 0.787 for government support, and 0.812 for start-up growth. These results indicate that the questionnaire items for each construct are internally consistent and reliable for further analysis.

Correlation Analysis

The Pearson correlation analysis was conducted to examine the relationships between the variables. The results are presented in Table 2.

Table 2. Correlation Analysis					
Variable	Entrepreneurship	Government	Start-Up		
	Education	Support	Growth		
Entrepreneurship	1	0.523**	0.656**		
Education					
Government Support	0.523**	1	0.586**		
Start-Up Growth	0.656**	0.586**	1		

Source: data analysis, 2024

The results show that both entrepreneurship education and government support are positively and significantly correlated with start-up growth (p < 0.01). This indicates that higher levels of entrepreneurship education and government support are associated with increased start-up growth.

Multiple Regression Analysis

A multiple regression analysis was conducted to examine the combined effect of entrepreneurship education and government support on start-up growth. The results are presented in Table 3.

Table 3. Multiple Regression							
Variable	Coefficient (B)	Standard Error	t-value	p-value			
Constant	0.457	0.232	1.966	0.056			
Entrepreneurship Education	0.483	0.105	4.804	0.000**			
Government Support	0.362	0.127	3.007	0.005**			

Source: data analysis, 2024

The results show that both entrepreneurship education (B = 0.483, p = 0.000) and government support (B = 0.362, p = 0.005) have a significant positive effect on start-up growth. The adjusted R-squared value of the model is 0.53, indicating that the model explains 53% of the variance in start-up growth.

Discussion

The results of this study demonstrate that both entrepreneurship education and government support play significant roles in promoting the growth of start-up businesses in Bogor. These findings are consistent with previous studies that have highlighted the importance of entrepreneurial education and institutional support in fostering business success. The results indicate that entrepreneurship education has a stronger influence on start-up growth than government support, as reflected by its higher coefficient value. This finding is consistent with [16], [17], [30], who highlighted how entrepreneurship education enhances the skills and knowledge essential for managing and expanding a business. By equipping entrepreneurs with competencies in financial management, business strategy, and marketing, educational programs play a crucial role in the success of new ventures. In Bogor, where start-ups often face challenges such as limited resources and market competition, entrepreneurship education provides a critical foundation for growth. Entrepreneurs with formal training are better equipped to identify opportunities, mitigate risks, and make informed decisions, improving their business prospects. This underscores the importance of investing in local entrepreneurship education programs, which can significantly contribute to regional economic development.

Government support has a positive and significant effect on start-up growth, though its impact is slightly lower than that of entrepreneurship education. This aligns with [21], [22], [31], who highlighted the importance of government programs in providing financial aid, regulatory support, and infrastructure for new businesses. In Indonesia, initiatives such as funding schemes and tax incentives aim to encourage entrepreneurship, particularly in regions like Bogor. The findings suggest that government support helps alleviate external barriers, such as access to funding and regulatory challenges, which entrepreneurs often face. However, the slightly lower impact of government support compared to education indicates that while external assistance is important, internal capabilities—developed through education—are more crucial for sustained growth. This underscores the need for a balanced approach, where both education and institutional support are prioritized to promote start-up development.

Implications for Policy and Practice

The findings of this study have important implications for policymakers, educators, and entrepreneurs in Bogor and similar regions. There is a clear need to strengthen entrepreneurship education programs at both academic and vocational levels, with institutions collaborating with industry practitioners to align curricula with real-world challenges faced by start-ups. Government policies promoting entrepreneurship education should be expanded to reach rural areas and underserved communities. While government support positively impacts start-up growth, improving the accessibility and effectiveness of these programs is crucial. Policymakers should focus on simplifying access to financial aid, reducing regulatory burdens, and offering more personalized mentorship to better support start-ups. Entrepreneurs, in turn, should actively seek both educational opportunities and government resources to maximize their chances of success, combining formal knowledge with external support to navigate the complexities of business growth in competitive environments.

CONCLUSION

This study demonstrates that both entrepreneurship education and government support significantly influence the growth of start-up businesses in Bogor, with entrepreneurship education having a stronger impact. The results suggest that equipping entrepreneurs with essential business knowledge and skills is crucial for their success, while government support provides valuable external resources to help overcome challenges like funding access and regulatory hurdles. From a policy perspective, the findings highlight the need to enhance entrepreneurship education programs and expand their accessibility, alongside creating more targeted and efficient government support programs tailored to start-ups' specific needs. By addressing both internal (education) and external (support) factors, policymakers can foster a more conducive environment for start-up growth. Entrepreneurs should prioritize formal education while leveraging government resources to support their ventures. Future research could investigate the long-term effects of these variables on business sustainability and explore their impact in other regions or industries.

REFERENCES

- [1] M. Fritsch and F. Noseleit, "Start-ups, long-and short-term survivors, and their contribution to employment growth," *J Evol Econ*, vol. 23, pp. 719–733, 2013.
- [2] T. P. Nugrahanti and A. S. Jahja, "Audit judgment performance: The effect of performance incentives, obedience pressures and ethical perceptions," *Journal of Environmental Accounting and Management*, vol. 6, no. 3, pp. 225–234, 2018.
- [3] M. Fritsch and A. Schroeter, "Are more start-ups really better? Quantity and quality of new businesses and their effect on regional development," Jena Economic Research Papers, 2009.
- [4] E. Litau, "Entrepreneurship and economic growth: A look from the perspective of cognitive economics," in *Proceedings of the 2018 9th International Conference on E-business, Management and Economics*, 2018, pp. 143–147.
- [5] H. Ashari, T. P. Nugrahanti, and B. J. Santoso, "The role of microfinance institutions during the COVID-19 pandemic," *Global Business and Economics Review*, vol. 30, no. 2, pp. 210–233, 2024.
- [6] P. D. Reynolds, "Entrepreneurship in developing economies: The bottom billions and business creation," *Foundations and Trends*® *in Entrepreneurship*, vol. 8, no. 3, pp. 141–277, 2012.
- [7] H. Ashari and T. P. Nugrahanti, "Household economy challenges in fulfilling life needs during the Covid-19 pandemic," *Global Business and Economics Review*, vol. 25, no. 1, pp. 21– 39, 2021.
- [8] M. C. W. Rosa, E. G. Sukoharsono, and E. Saraswati, *The role of venture capital on start-up business development in Indonesia*. Muhammadiyah University Yogyakarta, 2019.
- [9] I. Agustina, H. Khuan, B. Aditi, S. A. Sitorus, and T. P. Nugrahanti, "Renewable energy mix enhancement: the power of foreign investment and green policies," *International Journal of Energy Economics and Policy*, vol. 13, no. 6, pp. 370–380, 2023.
- [10] Y. Zhao, X. Zhao, J. Shi, H. Du, R. K. Marjerison, and C. Peng, "Impact of entrepreneurship education in colleges and universities on entrepreneurial entry and performance," *Economic research-Ekonomska istraživanja*, vol. 35, no. 1, pp. 6165–6184, 2022.
- [11] T. P. Nugrahanti and A. S. Pratiwi, "The Remote Auditing and Information Technology," *Journal of Accounting and Business Education*, vol. 8, no. 1, pp. 15–39, 2023.
- [12] A. Damrath, "The crucial role of entrepreneurship education at university using different educational practices," *Ekonomia–Wroclaw Economic Review*, vol. 27, no. 4, pp. 21–36, 2021.
- [13] A. Yahya, Y. Bala, and M. A. Girei, "Entrepreneurship education and training: An imperative towards effective sustainable development in Nigeria economy," *International Journal of Management Studies and Social Science Research*, vol. 4, no. 5, pp. 31–39, 2022.
- [14] O. A. Gerasimenko and D. I. Ushakov, "Startup: Meta-Analysis, Viability Assessment, Formation Of Conditions For The Development Of Ideas In The Educational Sphere," *Business Strategies*, vol. 11, no. 1, 2023.
- [15] A. A. Salam and I. Siswanto, "The Effect of Entrepreneurship Education on Student's Entrepreneurship Intention in Vocational School," *Indonesian Research Journal in Education* IRJE1, vol. 5, no. 1, pp. 85–102, 2021.
- [16] F. Bian, C.-H. Wu, L. Meng, and S.-B. Tsai, "A study on the relationship between entrepreneurship education and entrepreneurial intention," *International Journal of Technology, Policy and Management*, vol. 21, no. 1, pp. 1–19, 2021.
- [17] S. Saadat, A. Aliakbari, A. A. Majd, and R. Bell, "The effect of entrepreneurship education on graduate students' entrepreneurial alertness and the mediating role of entrepreneurial mindset," *Education+ Training*, vol. 64, no. 7, pp. 892–909, 2021.
- [18] S. A. Adeyemo, P. O. Ogunleye, M. A. Adeyemi, and T. S. Kareem, "Entrepreneurship education as an impetus to entrepreneurial competence and entrepreneurial intentions

among polytechnic students: a quantitative approach," Asian Journal of Education and Social Studies, vol. 17, no. 4, pp. 29–37, 2021.

- [19] Y. Lv *et al.,* "How entrepreneurship education at universities influences entrepreneurial intention: Mediating effect based on entrepreneurial competence," *Front Psychol*, vol. 12, p. 655868, 2021.
- [20] Y. I. Treshchevsky, G. V Golikova, N. A. Serebryakova, S. A. Volkova, and T. A. Volkova, "The system of state support for small and medium entrepreneurship and evaluation of its effectiveness," *Espacios*, vol. 39, no. 12, p. 12, 2018.
- [21] J. Fernández-Sastre and F. Martín-Mayoral, "Assessing the impact of public support for innovation in an emerging innovation system," *International Journal of Technological Learning, Innovation and Development*, vol. 9, no. 1, pp. 42–64, 2017.
- [22] P. Igwe, "Entrepreneurial ecosystems and the role of government in promoting entrepreneurship," 2017.
- [23] M. W. Chen, Y. Chen, Z.-H. Wu, and N. Zhao, "Government Intervention, Innovation, and Entrepreneurship," University of Graz, Department of Economics, 2018.
- [24] T. Nguyen, M.-L. Verreynne, J. Steen, and R. T. de Oliveira, "Government support versus international knowledge: Investigating innovations from emerging-market small and medium enterprises," J Bus Res, vol. 154, p. 113305, 2023.
- [25] A. Giakoumelou, A. Salvi, O. Kvasova, and I. Rizomyliotis, "The start-up's roadmap to private equity financing: substituting discounts with a premium in valuation for growth," *International Journal of Entrepreneurial Behavior & Research*, 2023.
- [26] S. Jeon and J. Oh, "An Exploratory Study on the Determinants of Business Performance in Small Business Start-ups," 인터넷전자상거래연구, vol. 23, no. 2, pp. 23-37, 2023.
- [27] S.-H. Joo and G.-H. Shin, "Empirical analysis of effect of entrepreneurship on export performance: focusing on the mediated effect of technology capability and export support policy of start-ups," *Journal of Korea Trade*, vol. 24, no. 6, pp. 173–193, 2020.
- [28] D. M. Kristin, Y. U. Chandra, and M. N. Masrek, "Critical Success Factor of Digital Start-Up Business to Achieve Sustainability: A Systematic Literature Review," in 2022 International Conference on Information Management and Technology (ICIMTech), IEEE, 2022, pp. 583–588.
- [29] A. K. Pasayat, B. Bhowmick, and R. Roy, "Factors responsible for the success of a start-up: A meta-analytic approach," *IEEE Trans Eng Manag*, vol. 70, no. 1, pp. 342–352, 2020.
- [30] A. A. Salam and I. Siswanto, "The Effect of Entrepreneurship Education on Student's Entrepreneurship Intention in Vocational School," *Indonesian Research Journal in Education* | *IRJE*|, vol. 5, no. 1, pp. 85–102, 2021.
- [31] Y. I. Treshchevsky, G. V Golikova, N. A. Serebryakova, S. A. Volkova, and T. A. Volkova, "The system of state support for small and medium entrepreneurship and evaluation of its effectiveness," *Espacios*, vol. 39, no. 12, p. 12, 2018.