MIREJ Multidisciplinary Innovation Research Journal
Volume 1 Issue 2 Year 2025 Pages 19-31 | e–ISSN 3089-4069 | DOI: 10.70152
https://journal.akademimerdeka.com/ojs/index.php/mirej

The Effect of Entrepreneurial Perception in Linking Education to Students Satisfaction

Kevin Herdian Romdhoni[1]
Institut Prima Bangsa, Cirebon, Indonesia
hherdian987@gmail.com

Marshella Auliana Geovani A.S[2]
Institut Prima Bangsa, Cirebon, Indonesia
geovanimarshella6@gmail.com

Abstract: This study aims to examine the effect of entrepreneurship education and entrepreneurial perception on individual satisfaction in the context of higher education. The background of this research highlights the growing importance of entrepreneurship as a key competency for future career development, as well as the need to understand how students' educational experiences and perceptions influence their overall satisfaction. A quantitative approach was employed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze the relationships among the constructs. Data were collected through a questionnaire distributed to university students who had taken entrepreneurship-related courses. The findings reveal that while entrepreneurship education does not directly affect satisfaction, it significantly influences entrepreneurial perception, which mediates its impact on satisfaction. This result suggests that the effectiveness of entrepreneurship education is indirectly reflected through the development of positive perceptions, which enhance students' sense of fulfillment and engagement. The study contributes to the literature on entrepreneurship education by emphasizing the importance of perception as an intermediary variable, and offers practical implications for educators aiming to improve student satisfaction through curriculum design and instructional strategies.

Keywords: entrepreneurship education; entrepreneurial perception; pls-sem, student satisfaction.

INTRODUCTION

Entrepreneurship plays a vital role in modern economic and personal development, especially in the context of globalization and the rapidly evolving job market. As traditional career paths become increasingly unstable due to technological disruptions, economic volatility, and shifting industry demands, individuals are required to cultivate skills beyond academic knowledge to succeed in their professional lives. Among these skills, entrepreneurial competencies such as innovation, opportunity recognition, problem-solving, and risk management have emerged as crucial for personal growth and long-term employability (Martínez-Gregorio et al., 2021; Lyu et al., 2023).

In senior high school education, entrepreneurship is no longer treated as an optional or peripheral subject. Instead, it is increasingly embedded within the national curriculum or offered as a thematic component in various subjects, including economics, social studies, and vocational programs. This shift is driven by the growing awareness that entrepreneurial thinking is beneficial for all students, regardless of whether they plan to become business owners. Entrepreneurship education at the high school level aims to develop students' ability to recognize opportunities, create value, and respond effectively to real-world challenges

(Adelaja et al., 2023; Munawar et al., 2023). Schools respond to this need by offering project-based learning, competitions, school-based enterprises, and experiential activities to nurture an entrepreneurial mindset.

Despite these efforts, the actual impact of entrepreneurship education remains a topic of discussion among educators and researchers. While several studies affirm that entrepreneurship education can increase students' entrepreneurial interest and confidence, others find the outcomes to be inconsistent or highly dependent on contextual factors (Adeel et al., 2023; Abaci, 2022). The effectiveness of such education may not lie solely in delivering content or activities, but also in how students perceive and internalize what they learn.

Entrepreneurial perception, in this regard, refers to how students cognitively and emotionally interpret entrepreneurship as a meaningful and valuable path. It includes their understanding of entrepreneurial concepts, attitudes toward risk, self-efficacy in entrepreneurial tasks, and beliefs about the personal or societal benefits of entrepreneurship (Haddad et al., 2021; Wang et al., 2022). Students who hold a positive perception of entrepreneurship are more likely to engage actively with the subject matter, relate it to their personal aspirations, and experience a greater sense of fulfillment from learning.

Satisfaction, as an emotional and cognitive outcome, plays an important role in measuring the success of educational programs. In the school setting, satisfaction reflects how well students' expectations are met in terms of relevance, delivery, usefulness, and personal impact (San-Martín et al., 2021). Higher satisfaction levels are often associated with stronger motivation, better learning outcomes, and greater engagement. Therefore, it is important to understand what factors lead to increased satisfaction, particularly in relation to entrepreneurial learning.

However, the relationship between entrepreneurship education and satisfaction is not always direct. Some students may enjoy learning about entrepreneurship because it aligns with their interests, while others may feel disconnected if the material seems abstract or irrelevant to their lives. This suggests that entrepreneurial perception may serve as a mediating factor. When students perceive entrepreneurship education as relevant, practical, and empowering, they are more likely to feel satisfied, even if the educational content itself is relatively standardized (Liu et al., 2022; Ismail et al., 2015).

Although this mediating relationship is important, few studies have explicitly examined how perception links entrepreneurship education with student satisfaction—especially at the senior high school level. Most research has focused on direct outcomes such as entrepreneurial intention or small business creation, rather than students' subjective experiences (Kusa et al., 2021).

This study addresses that gap by proposing and testing a structural model that includes entrepreneurship education, entrepreneurial perception, and student satisfaction. Based on psychological and educational theory, the model hypothesizes that entrepreneurship education influences satisfaction both directly and indirectly through perception. This reflects the idea that how students make sense of and value their learning experiences shapes the ultimate impact of those experiences.

To test this model, a quantitative approach using Partial Least Squares Structural Equation Modeling (PLS-SEM) was adopted. This method is effective for analyzing complex relationships between abstract concepts and allows for simultaneous testing of measurement and structural models (Hair et al., 2017). Data were collected through a survey administered to senior high school students who had participated in entrepreneurship-related classes or activities. The instrument included validated indicators for each construct—entrepreneurship education, perception, and satisfaction—using a Likert scale.

The results of this study are expected to contribute to the literature on entrepreneurship education by showing how perception serves as a key psychological factor in shaping satisfaction. Unlike studies that focus only on behavior or intention, this research adds to our understanding of the emotional and evaluative aspects of entrepreneurial learning at the secondary education level. The findings also provide practical guidance for teachers and school administrators seeking to improve the impact of entrepreneurship programs.

Educators can apply these insights by developing learning experiences that foster positive perceptions, such as incorporating real-life case studies, guest speakers, mentorship from entrepreneurs, and student-led projects. These approaches help make entrepreneurship education more meaningful and relatable to students' lives. Schools can also evaluate how well their instructional methods and program goals align with students' interests and motivations.

Despite the growing emphasis on entrepreneurship education, limited empirical research has explored how students' perceptions mediate its impact on satisfaction. Many studies focus solely on direct effects, overlooking the internal psychological mechanisms that may influence students' outcomes. This study fills that gap by investigating entrepreneurial perception as a mediating variable, providing a more nuanced understanding of how educational interventions translate into student satisfaction.

In summary, this study investigates how entrepreneurship education and perception jointly influence satisfaction among senior high school students. By combining psychological and educational perspectives, it provides a more comprehensive understanding of the subjective experience of entrepreneurial learning. The use of PLS-SEM strengthens the empirical foundation for this model and offers valuable insights for future research and educational practice.

Although entrepreneurship education has been extensively studied, particularly its influence on entrepreneurial intention and business creation, relatively few studies have investigated its effect on student satisfaction an important emotional and evaluative outcome of learning. Most existing research tends to focus on direct relationships between entrepreneurship education and outcome variables, overlooking the internal psychological mechanisms that may influence these outcomes.

Entrepreneurial perception, which refers to how students interpret and value entrepreneurship as a concept and career path, has been identified as an important affective factor. However, its role as a mediating variable especially in linking entrepreneurship education to student satisfaction remains underexplored, particularly in the context of secondary education such as senior high schools.

This study aims to address this research gap by examining entrepreneurial perception not only as an outcome of education but also as a psychological bridge that transforms educational inputs into meaningful student satisfaction.

The novelty of this research lies in highlighting entrepreneurial perception as a central mediating mechanism, which offers a more nuanced understanding of how entrepreneurship education can be made more effective. By doing so, this study expands the theoretical framework of entrepreneurship learning beyond behavioral outcomes to include emotional and subjective experiences of students.

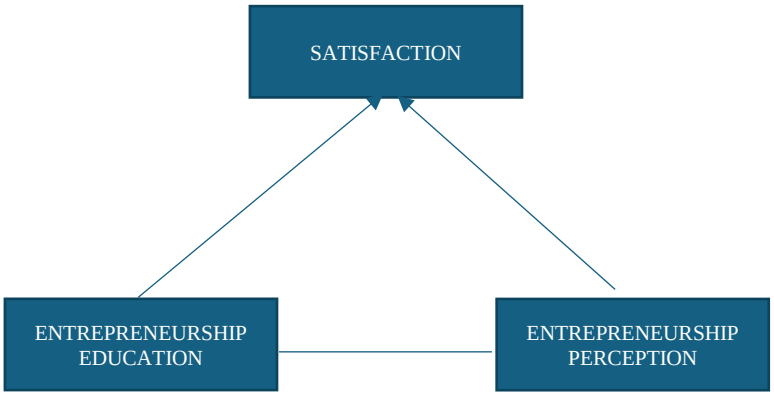

Figure 1. Conceptual Model

METHODS

Research Design

This study employs a quantitative explanatory approach using Partial Least Squares Structural Equation Modeling (PLS-SEM). This design was chosen to examine the relationship between two independent variables entrepreneurship education and entrepreneurial perception and their impact on individual satisfaction. The PLS-SEM method enables the analysis of both direct and indirect effects among latent variables, providing a thorough grasp of the ways in which entrepreneurship education molds students' viewpoints and ultimately affects their general contentment with their learning journeys.

Population and Sample

The population in this study consists of vocational school students at SMK Negeri 1 Kedawung who have participated in entrepreneurship-related learning activities. A total of 240 students were selected as the research sample. The sampling technique employed was purposive sampling, with respondents chosen based on their exposure to entrepreneurship education within the school's curriculum. This sample size is deemed adequate for PLS-SEM analysis, which is suitable for medium to large models and provides sufficient statistical power for model testing and path analysis.

Research Instruments

The questionnaire was developed based on existing validated instruments in entrepreneurship education research, particularly those adapted from Adeel et al. (2023), Ismail et al. (2015), and Haddad et al. (2021). Each construct entrepreneurship education, entrepreneurial perception, and satisfaction was operationalized into measurable indicators that were modified to align with the context and comprehension level of vocational senior high school students.

The questionnaire was constructed using Google Forms to facilitate efficient data handling. Although it was hosted online, the distribution and data collection were conducted offline with researchers visiting classrooms in person to administer the instrument. This approach allowed students to complete the form using school devices or personal smartphones under researcher supervision, ensuring that each item was understood correctly and independently answered.

Prior to full-scale data collection, the questionnaire was subjected to expert validation by two university lecturers specializing in entrepreneurship education and one senior teacher. Their feedback led to revisions on item wording and ordering to enhance

clarity and contextual fit. During the offline session, students also received brief verbal instructions, and researchers were available to clarify any potential confusion regarding item interpretation.

This hybrid approach digital form with in-person facilitation enabled real-time clarification, reduced misinterpretation, and ensured completeness of responses. As a result, the instrument demonstrated adequate reliability during actual data analysis, with all constructs showing acceptable values for internal consistency.

Data Collection Procedure

Data collection was conducted offline during regular school hours with the cooperation of teachers and administrators at SMK Negeri 1 Kedawung. Prior to administering the questionnaire, students were informed about the research objective, and their participation was entirely voluntary. Furthermore, respondents were assured of the confidentiality of their responses and participants received guidance regarding the completion of the questionnaire. The adoption of Google Forms allowed for efficient data management and minimized errors in data entry. All responses were checked for completeness before proceeding to analysis.

Data Analysis Technique

The collected data underwent analysis using SmartPLS 3 software to conduct Partial Least Squares Structural Equation Modeling (PLS-SEM). This analytical process was structured into two primary phases: the evaluation of the measurement model and the assessment of the structural model. Within the measurement model, convergent validity was examined through factor loadings and Average Variance Extracted (AVE), while composite reliability and Cronbach's Alpha were employed to gauge internal consistency. Discriminant validity was assessed by applying the Fornell-Larcker criterion.

In the structural model, path coefficients, t-statistics, and p-values were analyzed through bootstrapping procedures to determine the significance of relationships among variables. The coefficient of determination (R^2) was used to assess the model's explanatory power, while the effect size (f^2) and predictive relevance (Q^2) were also calculated to provide further insights into the model's quality. The overall model fit and mediation effects were examined to validate the research hypotheses.

In the measurement model evaluation, convergent validity was assessed using the Average Variance Extracted (AVE). While most constructs in the model met the threshold of AVE ≥ 0.50, as suggested by Fornell and Larcker (1981), one construct Entrepreneurial Perception (EP) yielded an AVE of 0.492, which is slightly below the conventional cut-off. However, this value is still considered acceptable under certain conditions. According to Hair et al. (2017), an AVE slightly below 0.50 can be tolerated when composite reliability (CR) remains above 0.70, indicating that the construct's indicators still demonstrate adequate internal consistency. In this study, the Entrepreneurial Perception construct had a Composite Reliability of 0.905 and Cronbach's Alpha of 0.885, both of which surpass the recommended thresholds.

Moreover, all individual item loadings for the EP construct exceeded 0.60, and the construct also demonstrated satisfactory discriminant validity using the Fornell-Larcker criterion. Therefore, despite the marginal shortfall in AVE, the overall evidence supports the retention of the construct as statistically valid and theoretically meaningful. It is acknowledged, however, that future research may improve convergent validity by refining or increasing the number of indicators to better capture the latent structure of entrepreneurial perception among high school students.

Research Ethics

Ethical considerations were carefully observed throughout the research process. Prior to data collection, permission was obtained from the school administration at SMK Negeri 1 Kedawung. Participants were informed about the objectives of the study, and their consent was obtained before participation. Anonymity and confidentiality of all respondents were strictly maintained. Participation was voluntary, and students were assured that they could withdraw at any time without any consequences. The researchers ensured that no form of coercion or academic pressure was involved in the data collection process, and all data were used solely for academic research purposes.

RESULT AND DISCUSSION

SmartPLS 3 was used to analyze the relationships between constructs in this study and to test the significance of hypothesized paths in the structural model. The sample consisted of 240 respondents drawn from senior highscool students who had experienced entrepreneurship-related education. The model was assessed using a two-step approach: (1) evaluation of the measurement model (outer model) for reliability and validity, and (2) evaluation of the structural model (inner model) for path coefficients, R-square values, and hypothesis testing.

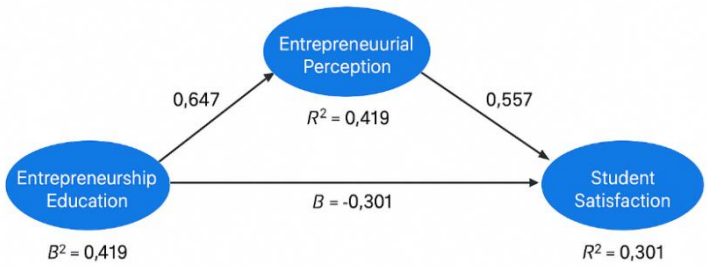

Figure 2. Path Diagram of the Proposed Model

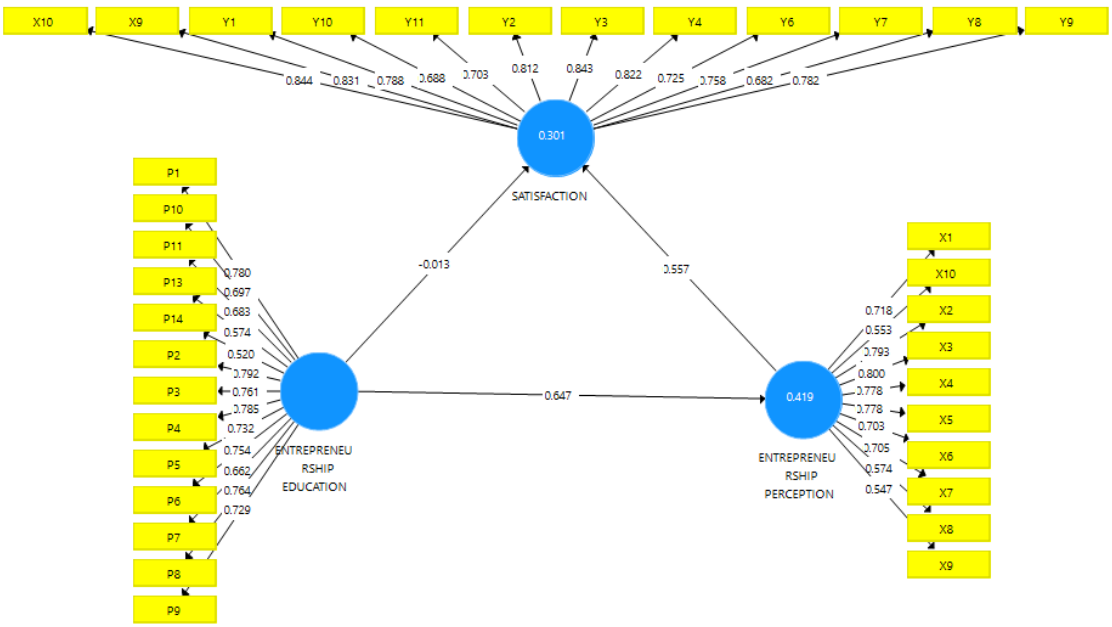

Figure 3. PLS Algorithm Results

This study aimed to examine the role of Entrepreneurship Education and Entrepreneurial Perception in shaping students' satisfaction with learning experiences in the context of entrepreneurship education among senior high school students. As an initial step, construct validity tests were conducted on each indicator used to measure the latent variables in the model. The validation process employed the Partial Least Squares Structural Equation Modeling (PLS-SEM) approach. The results showed that all indicators met the required thresholds for factor loading, suggesting that each item effectively represented the intended construct.

For the Entrepreneurship Education construct, several indicators were retained after the validity assessment. These indicators reflected core aspects of entrepreneurship learning at the school level, such as students' understanding of entrepreneurial concepts, their engagement in entrepreneurial projects, and their exposure to opportunity recognition and business idea development. Similarly, the Entrepreneurial Perception construct was represented by indicators related to students' attitudes toward entrepreneurship, their belief in their own entrepreneurial capabilities (self-efficacy), and their perception of entrepreneurship as a valuable and realistic career path.

For the Satisfaction construct, the retained indicators demonstrated that students' satisfaction stemmed from their belief that entrepreneurship learning is relevant, their enjoyment of classroom activities, and their perceived personal growth through the learning process. Following construct validation, individual scores were generated for each latent variable and used for structural model analysis. The PLS-SEM method allowed for simultaneous evaluation of both direct and indirect effects among the variables. The model tested whether Entrepreneurship Education influences Satisfaction directly, as well as indirectly through the mediating role of Entrepreneurial Perception.

The descriptive analysis revealed a tendency that students with higher levels of entrepreneurial perception—those who see entrepreneurship as meaningful and attainable—tend to report greater satisfaction with their learning experience. In contrast, students who showed lower perception of entrepreneurship often reported lower satisfaction levels, even if they were exposed to similar educational content. Interestingly, the direct relationship between Entrepreneurship Education and Satisfaction was found to be weak and not statistically significant, which suggests that perception acts as a crucial mediator in the model.

These findings reinforce the importance of shaping students' perception in order to optimize the impact of entrepreneurship education. While structured programs and course content are essential, students' internal interpretation of what they learn determines the degree to which they feel fulfilled and engaged. With strong construct validity and significant indirect effects identified, this model highlights the need for perception-oriented teaching strategies that connect learning materials to students' personal goals, values, and future aspirations.

Table 1. Convergent Validity and Composite Reliability Test Results

Construct	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
S	939	949	947	601
EE	919	919	931	511
EP	885	885	905	492

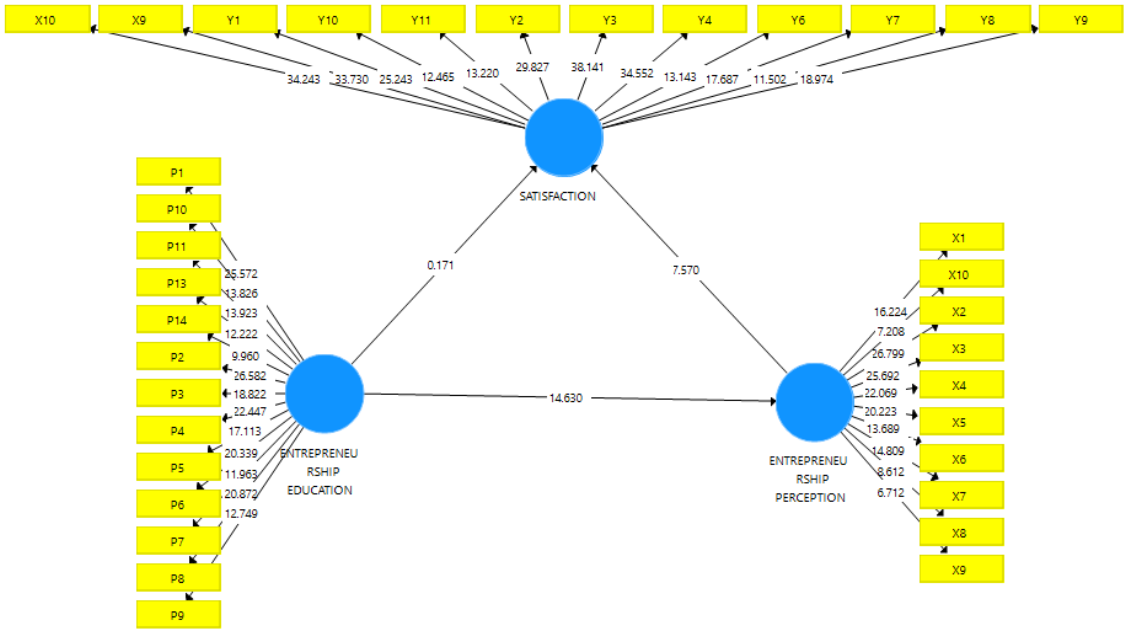

Figure 4. Bootstrapping Results

In SMART-PLS, evaluating the measurement model starts by assessing construct reliability and convergent validity to ensure accurate and consistent latent variable measurement. Reliability reflects indicator internal consistency, while convergent validity indicates how well a construct's indicators represent the same concept. Reliability is assessed using Cronbach's Alpha, rho_A, and Composite Reliability. Acceptable values confirm indicators consistently measure their latent construct. The table shows all constructs have good reliability. Convergent validity is evaluated with Average Variance Extracted (AVE), measuring the variance explained by the construct versus measurement error. Adequate convergent validity is when AVE exceeds the standard minimum. In this analysis, two constructs meet the AVE criterion, indicating their indicators effectively reflect a single latent dimension. One construct has an AVE slightly below the threshold, suggesting its indicators are less convergent. While not immediately invalidating the model, it suggests refining measurement items or further validation to strengthen the construct's convergent validity. Overall, the table's results confirm the measurement model has sufficient reliability and generally strong convergent validity, with only minor revisions potentially needed to optimize construct representation.

Table 2. Discriminant Validity Test

Construct	EE	EP	S
Entrepreneurship Education	715		
Entrepreneurship Perception	647	701	
Satisfaction	348	549	775

These results indicate that the construct meets the requirements for convergent validity, as demonstrated by adequate internal consistency and the ability of the indicators to represent the intended concept effectively. Furthermore, the correlation between each construct and its own indicators is higher than its correlation with other constructs, which confirms that the construct also satisfies the criteria for discriminant validity. Therefore, the

construct can be considered both valid and reliable, and is appropriate to be used in the next stage of analysis, namely the structural model evaluation.

Table 3. Determination Coefficient (R2)

Construct	R Square	R Square Adjusted
EP	419	416
S	301	295

The explanatory power of the structural model was evaluated using the coefficient of determination (R^2). This coefficient indicates the extent to which the independent variables account for the variance in the endogenous constructs. In this study, entrepreneurship education was found to explain a substantial portion of the variance in entrepreneurial perception, indicating a meaningful contribution of educational exposure to students' interpretation and valuation of entrepreneurship.

Furthermore, both entrepreneurship education and entrepreneurial perception were found to collectively explain a considerable proportion of the variance in satisfaction. This suggests that the model is capable of capturing important psychological and experiential elements influencing how students evaluate their entrepreneurial learning. The inclusion of perception as a mediating variable enriches the model's explanatory capacity, demonstrating its relevance in understanding the internal processes that translate educational inputs into evaluative outcomes.

The adjusted values confirm the model's consistency and robustness by accounting for complexity and avoiding overfitting. These results support the theoretical assumption that perception serves as a central psychological mechanism linking learning experiences to emotional and cognitive evaluations such as satisfaction.

Table 4. Hyptohesis Test Results

Construct	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
EE -> EP	0.647	0.651	0.044	14.630	0.000
EE -> S	-0.013	-0.014	0.074	0.171	0.864
EP -> S	0.557	0.551	0.074	7.570	0.000

The structural model analysis indicates that entrepreneurship education significantly influences students' entrepreneurial perception, suggesting that exposure to entrepreneurial learning positively shapes how students view and interpret entrepreneurship. However, entrepreneurship education does not directly affect student satisfaction, implying that the learning experience alone may not be sufficient to enhance satisfaction without meaningful internalization. In contrast, entrepreneurial perception has a strong and positive impact on satisfaction, showing that students who perceive entrepreneurship as relevant and valuable are more likely to feel satisfied with their learning experience. These findings highlight the mediating role of perception, where entrepreneurship education contributes to satisfaction indirectly by first shaping how students perceive the subject matter.

CONCLUSION

Based on the analysis and discussion, it can be concluded that entrepreneurship education and entrepreneurial perception play a meaningful and interconnected role in

shaping students' satisfaction in the context of entrepreneurship learning at the senior high school level. Through the PLS-SEM approach, this study found that entrepreneurship education has a significant positive effect on entrepreneurial perception, and perception in turn strongly contributes to students' satisfaction. However, the direct effect of entrepreneurship education on satisfaction was found to be statistically insignificant. These findings suggest that the influence of entrepreneurship education on satisfaction occurs indirectly, highlighting entrepreneurial perception as a key mediating variable. The model demonstrated moderate explanatory power, with entrepreneurial perception accounting for approximately 42% of its variance and satisfaction explained by 30% of the combined effects, indicating a substantial contribution of the perception pathway to students' evaluative outcomes.

Theoretically, these findings support Zimmerman's (2002) assertion on the role of cognitive-affective processes in learning outcomes, and affirm the relevance of perception as a determinant of emotional and behavioral responses in educational settings. This study contributes to the academic literature by presenting a mediated structural model in which the internalization and interpretation of entrepreneurship content—rather than the content itself—play a central role in shaping student satisfaction (Haddad et al., 2021; Liu et al., 2022). Practically, the results provide clear implications for educators and curriculum developers. Learning strategies that promote reflection, relevance, and self-efficacy in entrepreneurship education are essential for nurturing positive perceptions, which in turn foster satisfaction. Approaches such as experiential learning, mentorship, real-world problem solving, and student-led projects can enhance personal meaning and engagement in the learning process (Adelaja et al., 2023; Munawar et al., 2023).

Nevertheless, this study has limitations, particularly in terms of sampling, which was limited to one senior high school. As such, the generalizability of the findings is limited and should be tested across various educational contexts. Future studies are encouraged to include additional variables such as learning motivation, teaching quality, or student background, and to explore qualitative or mixed-method approaches that can provide richer insights into students' perceptions and satisfaction (Ismail et al., 2015; Kusa et al., 2021).

Overall, this study offers evidence that entrepreneurial perception plays a central mediating role between entrepreneurship education and satisfaction. Fostering students' positive perceptions through thoughtful, contextualized, and student-centered entrepreneurship learning can lead not only to greater satisfaction but also to more meaningful and impactful educational experiences that prepare students for the challenges of an evolving world. Future research may consider exploring other mediating variables such as entrepreneurial motivation, self-efficacy, or environmental support. Additionally, expanding the sample to different educational levels or cultural backgrounds could provide broader generalizability and richer insight into how entrepreneurship education impacts students' satisfaction.

These findings also suggest broader implications for the design of entrepreneurship education programs, especially in secondary education settings where perception development plays a critical role. Future research could expand this model by incorporating additional mediators such as self-efficacy, motivation, or perceived support, as well as testing the framework across different educational levels and cultural contexts to enhance its generalizability.

REFERENCES

Adeel, A., Batool, B., Khan, M. A., & Zaman, S. I. (2023). Impact of entrepreneurship education on entrepreneurial intentions: The mediating role of self-efficacy. *Education + Training*, *65*(1), 58–76. https://doi.org/10.1108/ET-01-2022-0012

Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta-analytic review. *Entrepreneurship Theory and Practice*, *38*(2), 217–254. https://doi.org/10.1111/etap.12095

Entrialgo, M., & Iglesias, V. (2017). The moderating role of entrepreneurship education on the antecedents of entrepreneurial intention. *International Entrepreneurship and Management Journal*, *13*, 105–125. https://doi.org/10.1007/s11301-016-0355-6

Fayolle, A., & Gailly, B. (2015). The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of Small Business Management*, *53*(1), 75–93. https://doi.org/10.1111/jsbm.12065

Ferreira, J. J., Raposo, M. L., Rodrigues, R. G., Dinis, A., & do Paço, A. (2012). A model of entrepreneurial intention: An application of the psychological and behavioral approaches. *Journal of Small Business and Enterprise Development*, *19*(3), 424–440. https://doi.org/10.1108/14626001211250144

Fini, R., Grimaldi, R., Marzocchi, G. L., & Sobrero, M. (2009). The foundation of entrepreneurial intention. *Academy of Management Proceedings*, *2009*(1), 1–6. https://doi.org/10.5465/ambpp.2009.44251018

Gerba, D. T. (2012). Impact of entrepreneurship education on entrepreneurial intentions of business and engineering students in Ethiopia. *African Journal of Economic and Management Studies*, *3*(2), 258–277. https://doi.org/10.1108/20400701211265036

Gielnik, M. M., Frese, M., Graf, J. M., & Kampschulte, A. (2012). Creativity in the opportunity identification process and the moderating effect of diversity of information. *Journal of Business Venturing*, *27*(5), 559–576. https://doi.org/10.1016/j.jbusvent.2011.11.001

Ismail, A., Zain, E. Z., Zulihar, Z., & Aswan, A. (2015). The role of entrepreneurial education in creating entrepreneurial intention. *Economic Journal of Emerging Markets*, *7*(2), 33–41. https://doi.org/10.20885/ejem.vol7.iss2.art1

Kakkonen, M.-L. (2011). Internationalization of SMEs: A case study of a Finnish SME. *Journal of Small Business and Enterprise Development*, *18*(3), 494–516. https://doi.org/10.1108/14626001111155602

Karimi, S., Biemans, H. J. A., Lans, T., Chizari, M., & Mulder, M. (2016). The impact of entrepreneurship education: A study of Iranian students' entrepreneurial intentions and opportunity identification. *Journal of Small Business Management*, *54*(1), 187–209. https://doi.org/10.1111/jsbm.12137

Liñán, F., & Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions: Citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal*, *11*(4), 907–933. https://doi.org/10.1007/s11301-015-0356-5

Liñán, F., Urbano, D., & Guerrero, M. (2011). Regional variations in entrepreneurial cognitions: Start-up intentions of university students in Spain. *Entrepreneurship & Regional Development*, *23*(3–4), 187–215. https://doi.org/10.1080/08985620903233929

Malebana, M. J. (2017). Knowledge of support services for new ventures and entrepreneurial intention in the rural provinces of South Africa. *Development Southern Africa*, *34*(1), 74–89. https://doi.org/10.1080/0376835X.2016.1259990

Martin, B. C., McNally, J. J., & Kay, M. J. (2013). Examining the formation of human capital in entrepreneurship: A meta-analysis of entrepreneurship education outcomes. *Journal of Business Venturing*, *28*(2), 211–224. https://doi.org/10.1016/j.jbusvent.2012.03.002

Mwasalwiba, E. S. (2010). Entrepreneurship education: A review of its objectives, teaching methods, and impact indicators. *Education + Training*, *52*(1), 20–47. https://doi.org/10.1108/00400911011017663

Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning & Education*, *16*(2), 277–299. https://doi.org/10.5465/amle.2015.0026

Nabi, G., Walmsley, A., Liñán, F., Akhtar, I., & Neame, C. (2018). Does entrepreneurship education in the first year of higher education develop entrepreneurial intentions? *Education + Training*, *60*(7/8), 765–780. https://doi.org/10.1108/ET-06-2017-0085

Nowiński, W., & Haddoud, M. Y. (2019). The role of inspiring role models in enhancing entrepreneurial intention. *Journal of Business Research*, *96*, 183–193. https://doi.org/10.1016/j.jbusres.2018.11.005

Pittaway, L., & Cope, J. (2007). Entrepreneurship education: A systematic review of the evidence. *International Small Business Journal*, *25*(5), 479–510. https://doi.org/10.1177/0266242607080656

Raposo, M., & do Paço, A. (2011). Entrepreneurship education: Relationship between education and entrepreneurial activity. *Psicothema*, *23*(3), 453–457. https://reunido.uniovi.es/index.php/PST/article/view/9382

Rauch, A., & Hulsink, W. (2015). Putting entrepreneurship education where the intention to act lies: An investigation into the impact of entrepreneurship education on entrepreneurial behavior. *Academy of Management Learning & Education*, *14*(2), 187–204. https://doi.org/10.5465/amle.2012.0293

Sánchez, J. C. (2013). The impact of an entrepreneurship education program on entrepreneurial competencies and intention. *Journal of Small Business Management*, *51*(3), 447–465. https://doi.org/10.1111/jsbm.12025

Shinnar, R. S., Hsu, D. K., & Powell, B. C. (2014). Self-efficacy, entrepreneurial intentions, and gender: Assessing the impact of entrepreneurship education longitudinally. *The International Journal of Management Education*, *12*(3), 561–570. https://doi.org/10.1016/j.ijme.2014.09.005

Solesvik, M. Z. (2013). Entrepreneurial motivations and intentions: Investigating the role of education major. *Education + Training*, *55*(3), 253–271. https://doi.org/10.1108/00400911311309314

Sun, H., Lo, C. T., Liang, B., & Wong, Y. L. (2017). The impact of entrepreneurial education on entrepreneurial intention of engineering students in Hong Kong. *Management Decision*, *55*(7), 1371–1393. https://doi.org/10.1108/MD-06-2016-0392

Walter, S. G., & Block, J. H. (2016). Outcomes of entrepreneurship education: An institutional perspective. *Journal of Business Venturing*, *31*(2), 216–233. https://doi.org/10.1016/j.jbusvent.2015.10.003

Walter, S. G., Parboteeah, K. P., & Walter, A. (2013). University departments and self-employment intentions of business students: A cross-level analysis. *Entrepreneurship Theory and Practice*, *37*(2), 175–200. https://doi.org/10.1111/j.1540-6520.2011.00460.x

Zhang, Y., Duysters, G., & Cloodt, M. (2014). The role of entrepreneurship education as a predictor of university students' entrepreneurial intention. *International Entrepreneurship and Management Journal*, *10*(3), 623–641. https://doi.org/10.1007/s11301-012-0246-z

Zollo, L., Laudano, M. C., Ciappei, C., & Zampi, V. (2017). Factors affecting universities' ability to foster students' entrepreneurial behavior. *Journal of Management Development*, *36*(2), 268–285. https://doi.org/10.1108/JMD-03-2016-0040