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Contribution of Prakerin, Entrepreneurship Learning Outcomes, and Soft Skills Towards Students' Interest in Entrepreneurship

Defelinu Harefa[1], M. Giatman[1], Ambiyar[1*], Dedy Irfan[1]

[1]Technology and Vocational Education Study Program, Graduate School Faculty of Engineering, Universitas Negeri Padang, Padang, Indonesia.

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Corresponding Author*:
Ambiyar
ambiyar@ft.unp.ac

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Abstract: Interest in entrepreneurship is a focus on entrepreneurship where there is a feeling of liking and accompanied by a desire to learn. Interest in entrepreneurship arises because of knowledge and information about entrepreneurship which is then continued to participate directly. This study aims to analyze the relationship between Prakerin experience, entrepreneurship learning outcomes, and Soft Skills on the entrepreneurial interest of students of Private Vocational High Schools of the Nias Regional Government. The type of research This study uses a quantitative approach with a correlational method. The goal is to measure the strength of the relationship between three independent variables. The results Entrepreneurship learning outcomes show a very strong and significant relationship (correlation 0.826; contribution 68.30%). Mastery of entrepreneurship material is the most influential factor in shaping entrepreneurial interest. The regression equation $\hat{Y} = 0.18 + 0.82\ X_2$ shows a significant impact of increasing entrepreneurial learning outcomes on entrepreneurial interest. Soft skills also have a strong and significant positive relationship (correlation 0.708; contribution 50.20%). Interpersonal and intrapersonal skills, such as communication, leadership, teamwork, and adaptability, play a crucial role in encouraging students to choose the entrepreneurial path. The regression equation $\hat{Y} = 0.38 + 0.61\ X_3$ shows that developing soft skills will significantly increase entrepreneurial interest.

Keywords: Entrepreneurship; Learning outcomes; Soft skills

Introduction

In the era of globalization, national economic resilience is highly dependent on the number of entrepreneurs, as they contribute to economic stability, reduced unemployment, and increased competitiveness. Indonesia, despite showing positive trends in reducing poverty and unemployment rates, still faces significant challenges, particularly with low entrepreneurial interest among vocational education graduates (Jauhari & Periansya, 2021; Suparman & Muzakir, 2023). This highlights the need to increase entrepreneurial interest, particularly among the younger generation, given the crucial role of entrepreneurship in economic growth, job creation, and driving innovation and creativity (Ngubane et al., 2023). Vocational High Schools (SMK) play a strategic role in preparing a skilled workforce and equipping students with entrepreneurial skills (Marliyah, 2024). Although the Industrial Work Practice (Prakerin) program is designed to provide hands-on work experience, numerous studies by Rakasiwi et al. (2023), indicate its focus is more on preparing students to become workers, rather than entrepreneurs. Vocational education should, in fact, also shape an entrepreneurial mindset and skills. Three key factors significantly influencing vocational high school students' entrepreneurial interest are internship

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experience, entrepreneurship subject learning outcomes, and soft skills.

Internships provide students with an understanding of the dynamics of the workplace, build professional networks, and develop technical and non-technical skills, which can motivate them to become entrepreneurs (Jardim, 2021; Dimov & Pistrui, 2024). Furthermore, strong entrepreneurship learning outcomes equip students with insight into business concepts, management, and marketing strategies, thereby increasing their confidence in starting a business (Pham et al., 2023; Ferdousi et al., 2025). Finally, soft skills such as communication, leadership, and time management are crucial factors for entrepreneurial success (Hussein, 2024; Mohammed & Ozdamli, 2024; Škare et al., 2022). While often under-focused in education, developing these soft skills is crucial for helping students face business challenges and develop their businesses sustainably (Tseng et al., 2019; Pons et al., 2024; Maulana, 2023).

In the context of globalization and the development of Industry 4.0, entrepreneurial skills are increasingly important for vocational education graduates. A study by Costa & Cipolla (2025) and Succi & Wieandt (2019), confirmed that individuals with a strong combination of technical and soft skills are better able to adapt to modern business challenges. Therefore, vocational education strategies should be directed towards fostering a stronger entrepreneurial ecosystem. Furthermore, project-based learning approaches and hands-on experience in entrepreneurship have proven effective in increasing student interest in entrepreneurship (Wardana et al., 2020; Al Issa et al., 2025). Implementing an educational model that is more oriented towards real-world experiences can help students develop the practical skills needed in the business world.

In the local context, the Nias Regional Government Private Vocational High School (SMK Swasta Pembda), as a vocational education institution, faces unique challenges in fostering entrepreneurial interest among its students. Given the economic conditions of the region, which still face challenges of poverty and limited employment opportunities, efforts to foster an entrepreneurial spirit among students are increasingly relevant and urgent. Initial research conducted through questionnaires with vocational high school students revealed that the majority of students prefer to work after graduation. The second most popular option is continuing education to a higher level, while interest in starting a business directly is at the lowest level. Students who choose to continue their education generally cite the desire to find a better career before starting their own business. Meanwhile, students who choose to work cite the desire to accumulate capital before starting a business. The main obstacle faced by students who do not choose entrepreneurship is limited initial capital to start a business.

Therefore, this study aims to analyze the relationship between internship experience, entrepreneurial learning outcomes, and soft skills on entrepreneurial interest among students at private vocational schools in the Nias Regional Government. The results are expected to contribute to the development of more effective learning strategies to encourage the emergence of young entrepreneurs capable of creating independent business opportunities and contributing to reducing unemployment and poverty in the region.

Method

Research Method

This study used a quantitative approach with a correlational method. The objective was to measure the strength of the relationship between three independent variables—Industrial Internship Experience (X1), Entrepreneurship Learning Outcomes (X2), and Soft Skills (X3)—and Entrepreneurial Interest (Y) as the dependent variable. In correlational research, no variable manipulation was performed.

Research Time and Location

This research was conducted between April 20 and May 21 at the Nias Regional Development (Pembda) Private Vocational High School (SMK), Gunungsitoli City, North Sumatra Province.

Population and Sample

Population

The study population was all 12th-grade students of the Nias Pembda Private Vocational High School who had completed Industrial Internship for the 2024/2025 Academic Year. The total population was 235 students, distributed across four majors: Building Modeling and Information Design (19 students), Automotive Engineering (138 students), Computer Network and Telecommunication Engineering (60 students), and Electronic Engineering (18 students).

Sample

Sampling was conducted using the Proportional Stratified Random Sampling technique. This technique ensures that the sample is drawn randomly and proportionally from each group (major) in the population, thus representing the characteristics of the entire population.

Operational Definition of Variables

This study measures four main variables: entrepreneurial interest (dependent variable), industrial internship experience (prakerin) (independent variable), entrepreneurship learning outcomes (independent variable), soft skills (independent variable).

Entrepreneurial Interest (Dependent Variable)

This is defined as the internal tendency of vocational high school students to choose an entrepreneurial career path, plan a business, and demonstrate the determination to start an independent business after graduation. This encompasses cognitive (knowledge of business opportunities), affective (interest in entrepreneurial activities), and conative (willingness to run a business) aspects. Measurement uses a 5-point Likert-scale questionnaire with indicators of entrepreneurial career preference, activity interest, risk-taking, and concrete planning.

Industrial Internship Experience (Prakerin) (Independent Variable)

This is defined as the intensity and quality of student involvement in real-world work practices in the industry. This includes depth of experience, type of work, task difficulty, learning opportunities, and professional interactions. Measurement using a Likert scale questionnaire (Strongly Agree to Strongly Disagree), where high scores indicate rich and relevant experiences.

Entrepreneurship Learning Outcomes (Independent Variable)

Represents students' level of understanding, attitudes, and skills in entrepreneurship from the learning process. This includes mastery of theoretical concepts (business planning, marketing, financial management) and practical skills. Measurement uses a 5-point Likert-scale questionnaire with indicators of conceptual understanding, planning ability, marketing strategy, simple financial management, and a positive attitude.

Soft Skills (Independent Variable)

A set of non-technical skills such as communication, leadership, responsibility, teamwork, time management, and problem-solving. Measurement uses a 5-point Likert-scale questionnaire with indicators of communication skills, teamwork, discipline, problem-solving, emotional management, and adaptability.

Research Instrument

Type of Instrument: Data were collected using a questionnaire distributed to a sample of students. All questionnaires for the three independent variables (X1, X2, X3) and the dependent variable (Y) used a Likert scale with five response options: Strongly Agree (S), Agree (S), Somewhat Agree (S), Disagree (TS), and Strongly Disagree (STS). Data Measurement Scale: Response options on the Likert scale were scored from 5 (S) to 1 (STS) for positive statements. Instrument Development: The instrument was developed based on the research variables. The development steps included: creating a grid based on indicators, developing statement items, and analyzing the rationale for their suitability to the indicators. Instrument analysis was conducted using SPSS version 20.

Instrument Trial

Before using the research instrument, a trial was conducted to ensure its validity and reliability.

Determining Trial Respondents

The instrument was pilot-tested on 32 students from the Nias Regional Government Private Vocational High School, drawn from the same population as the original research subjects.

Pilot Test Implementation

The pilot test was conducted on May 28, 2025, at the Nias Pembda Private Vocational High School, after obtaining permission from the principal. The instruments were distributed directly to selected respondents.

Pilot Test Data Analysis

Data from the pilot test were analyzed using SPSS to determine the validity and reliability of the instrument.

Instrument Validity Test

Validity was tested by comparing the corrected item-total correlation value with the product moment r value. An item was considered valid if its coefficient was positive and greater than the r value ($\alpha = 0.361$). Conversely, an item was invalid if its coefficient was negative or less than the r value.

Instrument Reliability Test

To ensure the internal consistency and reliability of the instrument, a reliability test was conducted using the Cronbach's Alpha formula using SPSS version 20.00. The reliability criterion was based on the rI (reliability coefficient) value compared to the r_{Table}, which was 0.361 (at a 5% significance level). The instrument was considered reliable if $rI > r_{Table}$. Based on the analysis, all variables demonstrated a very high level of reliability, well above the reliability threshold: Entrepreneurial Interest: 0.987; Field Work Practice: 0.918; Entrepreneurship Learning Outcomes: 0.989; Soft Skills: 0.98.

These Results Confirm that the Instrument Used for Data Collection is Reliable

Data Collection Techniques

Data were collected using a closed-ended questionnaire prepared according to the research variables. The data collection process was carried out systematically, including instrument preparation, data source determination, operator preparation, and planned data collection implementation.

Data Analysis Techniques

This study used quantitative data analysis using correlation regression statistical techniques to test the hypotheses. All data analysis was carried out with the help of the SPSS program.

Results and Discussion

Data Description

The following description presents the research data, which includes Entrepreneurial Interest (Y) as the dependent variable and Field Work Practice (X1), Entrepreneurship Learning Outcomes (X2), and Soft Skills (X3) as the independent variables. This data description is conducted to illustrate the condition of each variable, including the mean, median, mode, standard deviation, minimum score, maximum score, and total score (sum) for each variable (Appendix 5, page 1). The statistical calculations of the collected data for the four variables can be seen in Table 1.

Tabel 1. Description of research data Y, X1, X2, and X3

	Interest	Practice	Study	Soft	Interest	Practice
	Valid	149	149	149	149	Valid
	Missing	0	0	0	0	Missing
Mean	145.32	147.83	147.43	144.52	Mean	145.32
Median	144.00	148.00	144.00	142.00	Median	144.00
Mode	140	140	140	140	Mode	140
Std. Deviation	25.244	24.794	23.322	24.152	Std. Deviation	25.244
Variance	637.260	614.753	543.909	583.319	Variance	637.260
Range	140	140	133	136	Range	140
Minimum	35	35	42	39	Minimum	35
Maximum	175	175	175	175	Maximum	175
Sum	21653	22026	21967	21534	Sum	21653
Mean	145.32	147.83	147.43	144.52	Mean	145.32

Based on the table above, the four variables are described below.

Entrepreneurial Interest

Based on the data for the Entrepreneurial Interest variable, the distribution of scores is shown to be spread out from a minimum of 35 to a maximum of 175.00. From 149 respondents (N = 149), the mean score is 145.32, the median is 144.00, the most frequently occurring score (mode) is 140, the standard deviation is 25.244, and the variance is 637.260. To, present Teacher Job Satisfaction data in the form of a frequency distribution and histogram, it is necessary to determine the number of classes and their class intervals as follows:

Many classes (k) = 1 + 3.30 Log N
= 1 + 3.30 Log 149
= 1 + 3.30 x 2.17
= 1 + 7.17
= 8.10 rounded 9

$$\text{Interval} = \frac{\text{Highest Value} - \text{Lowest Value}}{\text{Many classes}} \quad (1)$$

$$= \frac{175 - 35}{8}$$

$$= 17.50 \text{ taken } 17$$

To clarify the number of interval classes, the calculated interval classes are arranged in a frequency distribution table, as shown in Table 2.

Table 2. Frequency distribution of entrepreneurial interest variable scores (Y)

Interval Class	Frequency	Percentage (%)
35–51	3	2.01
52–68	2	1.34
69–85	3	2.01
86–102	5	3.36
103–119	11	7.38
120–136	39	26.17
137–153	45	30.20
154–170	41	27.52
Total	149	100

To concretely represent the number of interval classes, the calculated number of interval classes is arranged in a frequency distribution list as shown in Table 2. By observing Table 2, a histogram of

Entrepreneurial Interest can be drawn as shown in Figure 1.

Table 2 and Figure 1 show that the distribution of entrepreneurial interest scores among students at the Nias Regional Government Private Vocational School (SMK Negeri Pembda) is dominated by 39 students (26.17%) in the average range (120–136), and 86 students (57.72%) in the above-average range (137–153 and 154–170). Meanwhile, 24 students (16.11%) out of a total of 149 students ranked below the average range (35–119). This indicates that more than three-quarters of the students have entrepreneurial interest scores in the moderate to high category. Therefore, it can be concluded that the majority of students have a strong attitude, interest, and drive towards entrepreneurial activities.

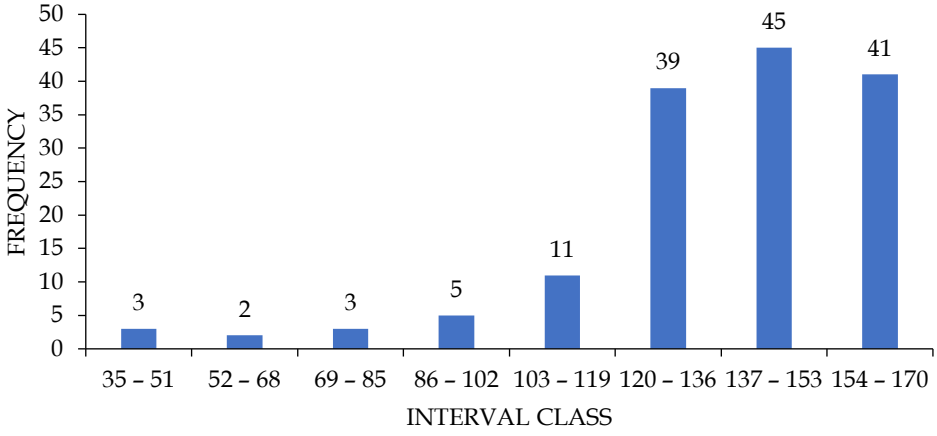

Figure 1. Histogram of interest in entrepreneurship

The level of achievement of the scores relative to the ideal score (175) also indicates that students' entrepreneurial interest is in the very good category. The frequency distribution in the upper-interval classes indicates that students not only understand the importance of entrepreneurship but also demonstrate mental readiness and motivation to enter the business world. This finding reinforces the relevance of the entrepreneurship learning approach in vocational high schools, as well as the role of industrial work experience and soft skills as supporting factors in fostering entrepreneurial interest. Therefore, strengthening practical and contextual entrepreneurship education needs to be continuously encouraged to maximize students' entrepreneurial potential.

Fieldwork Practice (X1)

Based on the Fieldwork Practice variable data, the distribution of scores is observed to be spread from a minimum of 35 to a maximum of 175.00 from 149 respondents (N = 149), with an average score of 147.83, a median of 148.00, a mode of 140, a standard deviation of 24.794, and a variance of 614.753.

Many classes (k) = 1 + 3.30 Log N
= 1 + 3.30 Log 149
= 1 + 3.30 x 2.17
= 1 + 7.17
= 8.10 taken 8

$$\text{Interval} = \frac{\text{Highest Value} - \text{Lowest Value}}{\text{Many classes}} \quad (2)$$

$$= \frac{175 - 35}{8}$$

$$= 17.50 \text{ taken } 18$$

To clarify the number of interval classes, the calculated interval classes are arranged in a frequency distribution list, as shown in the following table.

Table 3. Frequency distribution of field work practice variable scores

Interval Class	Frequency	Percentage (%)
35–52	2	1.34
53–70	2	1.34
71–88	2	1.34
89–106	3	2.01
107–124	12	8.05
125–142	41	27.52
143–160	48	32.21
161–178	39	26.17
Total	149	100

By paying attention to Table 3, a histogram of Principal Leadership can be depicted as shown in Figure 2.

Table 3 and Figure 2 illustrate the frequency distribution of fieldwork practice scores for students at the Nias Regional Government Private Vocational School. The data show that the majority of students are

in the 143–160 range (48 students (32.21%), followed by the 161–178 range (39 students (26.17%), and the 125–142 range (41 students (27.52%). This means that 128 students (85.90%) achieved fieldwork practice scores in the average or above category, indicating that most students had good to excellent work practice experience. Meanwhile, only 21 students (14.10%) scored below the average, spread across the four lowest range classes.

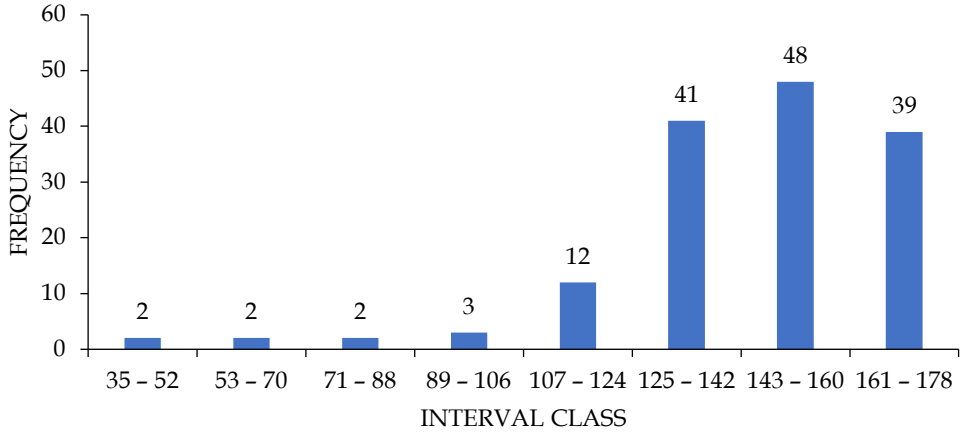

Figure 2. Histogram of fieldwork practice

These findings indicate that the implementation of fieldwork practice at the school is running optimally. Most students gain hands-on experience in the workplace, both in workshops and in partner industries, which strengthens their technical skills according to their expertise. Through internship activities, students not only learn to complete work assignments professionally but also understand how the business world operates in real life. Interaction with a real work environment encourages students to develop a disciplined, responsible work attitude, and adaptability, which ultimately impacts job readiness and fosters entrepreneurial interest.

Learning Outcomes (X2)

Based on the Learning Outcomes (X2) variable data, the distribution of scores is shown to be spread out from a minimum of 42 to a maximum of 175. From 149 respondents (N = 149), the average score is 147.43, the median is 144.00, the most frequently occurring statement score is 140, the standard deviation is 23.322, and the variance is 543.909. To present Interpersonal Communication data in the form of a frequency distribution and histogram, it is necessary to determine the number of classes and their class intervals as follows.

$$\begin{aligned}\text{Many classes (k)} &= 1 + 3.30 \text{ Log N}\\ &= 1 + 3.30 \text{ Log } 149\\ &= 1 + 3.30 \text{ x } 2.17\\ &= 1 + 7.17\\ &= 8.10 \text{ taken } 8\end{aligned}$$

$$\text{Interval} = \frac{\text{Highest Value} - \text{Lowest Value}}{\text{Many classes}} \quad (3)$$

$$= \frac{175 - 42}{8}$$

$$= 16.60 \text{ taken } 17$$

To clarify the number of interval classes, the calculated interval classes are arranged in a frequency distribution table, as shown in Table 4.

Table 4. Frequency distribution of entrepreneurship learning outcomes

Interval Class	Frequency	Percentage (%)
42–58	2	1.34
59–75	3	2.01
76–92	5	3.36
93–109	9	6.04
110–126	20	13.42
127–143	31	20.81
144–160	41	27.52
161–177	38	25.50
Total	149	100

By paying attention to Table 4, the histogram of Interpersonal Communication can be depicted as shown in Figure 3.

Table 3 and Figure 3 show the frequency distribution of entrepreneurship learning outcomes for students at the Nias Regional Government Private Vocational School. The majority of students were in the two highest interval classes, namely class 144–160 with 41 students (27.52%) and class 161–177 with 38 students (25.50%). This indicates that 79 students, or 53.02%, achieved high learning outcomes. Meanwhile, there were also quite a lot of students in the 127–143 interval class, namely 31 students (20.81%), who were in the average or above category. The total number of students

who obtained average or above scores (starting from a minimum score of 127) was 110 students, or 73.83%, indicating a dominance of students with good to very good achievements.

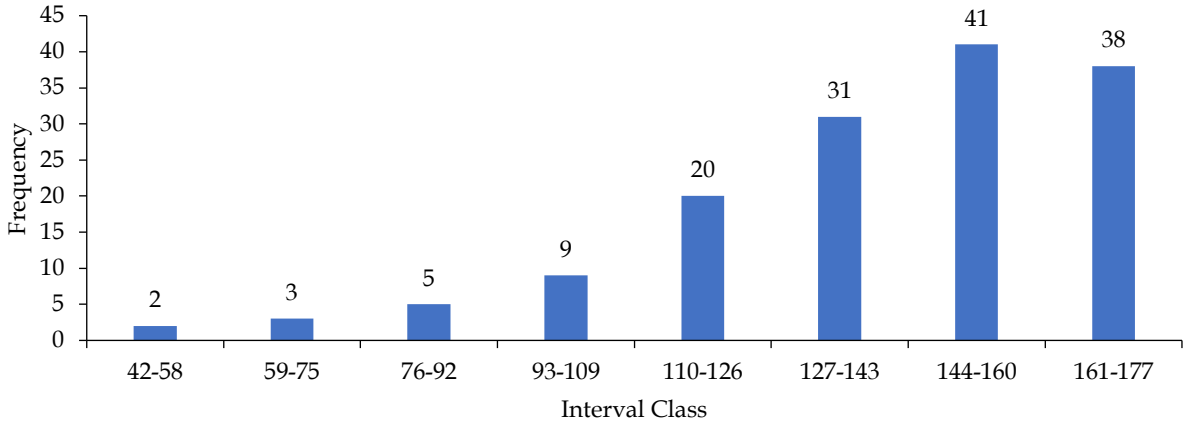

Figure 3. Soft skill histogram

Soft Skills (X3)

Based on the Soft Skills variable data, the distribution of scores is known to be spread out from a minimum of 39 to a maximum of 175. From 149 respondents (N = 149), the mean score is 144.52, the median is 142.00, the mode is 140, the standard deviation is 24.152, and the variance is 583.319.

Many classes (k) = 1 + 3.30 Log N
= 1 + 3.30 Log 149
= 1 + 3.30 x 2.17
= 1 + 7.17
= 8.10 taken 8

$$\text{Interval} = \frac{\text{Highest Value} - \text{Lowest Value}}{\text{Many classes}} \quad (4)$$

$$= \frac{175 - 39}{8}$$

$$= 17$$

To make the number of interval classes concrete, the number of interval classes that have been calculated are arranged in a frequency distribution list as shown in Table 5.

Tabel 5. Distribusi frekuensi soft skill

Interval Class	Frequency	Percentage (%)
39–55	3	2.01
56–72	4	2.68
73–89	7	4.70
90–106	11	7.38
107–123	18	12.08
124–140	31	20.81
141–157	42	28.19
158–174	33	22.15
Total	149	100

By paying attention to Table 5, a histogram of Soft Skills can be depicted as seen in Figure 4.

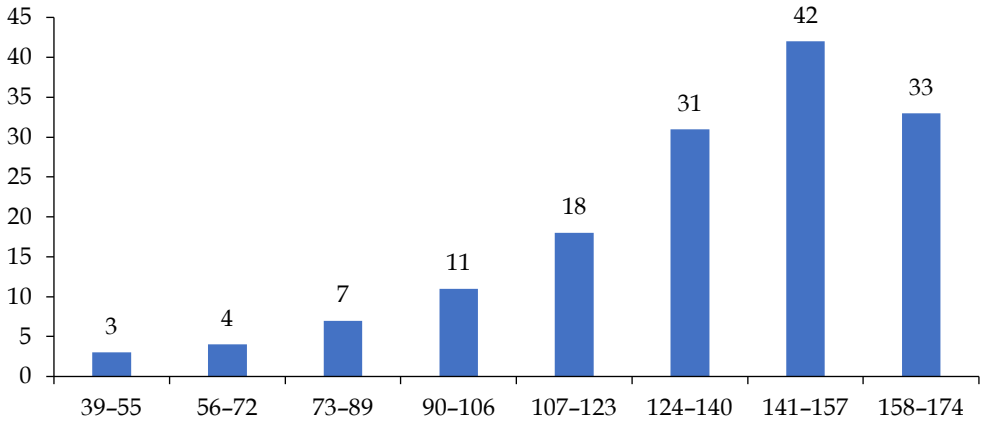

Figure 4. Soft skill histogram

Table 5 and Figure 4 show the frequency distribution of soft skills among students at the Nias Regional Government Private Vocational School (SMK). The data show that the majority of students possess a high level of soft skills, as evidenced by the dominant frequency in the 141–157 class (42 students (28.19%) and 158–174 class (33 students (22.15%). Adding the 124–140 class (31 students (20.81%) to the 106 students, or 71.15%, categorized as having high to very high soft skills. This indicates that most students have developed strong soft skills, such as communication, teamwork, adaptability, and work ethic.

Discussion

The hypothesis analysis indicates that Industrial Work Practice (X1), Entrepreneurship Learning Outcomes (X2), and Soft Skills (X3) have a positive and significant relationship with Entrepreneurial Interest (Y) among students at the Nias Regional Government Private Vocational School, both individually and collectively. This empirically supports the research hypothesis.

The Relationship between Industrial Internship (PKL) and Entrepreneurial Interest

PKL has a positive and significant relationship (correlation of 0.653; contribution of 42.60%) with students' entrepreneurial interest. This means that direct experience in the industry substantially shapes entrepreneurial orientation. The regression equation $\hat{Y} = 0.361 + 0.653\ X_1$ indicates that improving the quality of PKL will proportionally increase entrepreneurial interest. This finding is supported by experiential learning theory, where students not only acquire technical skills but also develop the ability to observe business opportunities and understand company operations. In the context of private vocational schools (SMK) in the Nias Regency Government, which faces employment challenges, PKL provides insight into entrepreneurship as a possible solution (Alzate et al., 2024; Al-Fattal, 2024; Miço & Cungu, 2023).

The level of achievement of respondents on the indicator "Understanding of work processes and industrial work ethic" (84.99%) demonstrates the effectiveness of the PKL program. Although the partial correlation (after controlling for entrepreneurial learning outcomes) decreased slightly to 0.266, PKL still had an independent contribution. This implies the importance of optimizing internships with a stronger entrepreneurial orientation, involving students in business decision-making, innovation, and marketing strategies (Bekata & Kero, 2025; Gomes et al., 2022; Ouragini & Lakhal, 2024). However, the 42.60% contribution also indicates that other factors still play a role, emphasizing the need to integrate internships with entrepreneurship learning and more comprehensive soft skills development.

The Relationship between Entrepreneurship Learning Outcomes and Entrepreneurial Interest

Entrepreneurship learning outcomes demonstrate a very strong and significant relationship (correlation of 0.826; contribution of 68.30%) with students' entrepreneurial interest. This is the largest contribution among the variables studied (López-Cabarcos et al., 2022; Valderrama et al., 2020). The regression equation $\hat{Y} = 0.181 + 0.826\ X_2$ indicates that improving entrepreneurship learning outcomes significantly encourages students to become entrepreneurs (Samala et al., 2022). This finding is consistent with the theory of planned behavior, where a good understanding of entrepreneurial concepts forms a strong positive attitude, which then fosters strong interest. The data distribution shows that 73.83% of students had average scores or above in entrepreneurship learning outcomes, with the indicator "Positive attitude towards entrepreneurial activities" reaching 84.96%. This indicates that entrepreneurship learning successfully transfers cognitive knowledge and shapes affective attitudes (Pham et al., 2023). The partial correlation (after controlling for internship experience) remains very strong (0.697), confirming its substantial and independent contribution. In regions with economic challenges, strong entrepreneurship learning outcomes equip students to become agents of change (García-González & Ramírez-Montoya, 2021; Zuo et al., 2025). The implication is the optimization of entrepreneurship learning with an experiential and project-based approach, balancing theory and practice, as well as the implementation of an entrepreneurial mindset learning model and business incubator programs in schools (Gabrielsson et al., 2025).

The Relationship between Soft Skills and Entrepreneurial Interest

Soft skills have a strong and significant positive relationship (correlation of 0.708; contribution of 50.20%) with students' entrepreneurial interest. The regression equation $\hat{Y} = 0.389 + 0.618\ X_3$ indicates that soft skill development will significantly increase entrepreneurial interest. Soft skills include communication, teamwork, leadership, adaptability, and emotional management, which are crucial for interacting with business stakeholders. The data shows that 71.15% of students have soft skills in the high to very high category, with "Discipline and Responsibility" the highest (82.86%). The balance of achievement in other soft skill indicators (e.g., communication 82.38%, teamwork 82.70%) indicates comprehensive character development. The partial correlation (after controlling for internship experience

and entrepreneurship learning outcomes) remained significant (0.460), indicating the unique contribution of soft skills that cannot be fully explained by other variables. This confirms that soft skills are an important independent factor in shaping vocational high school students' entrepreneurial interest, helping them build networks, communicate effectively, and adapt (Bhoyar et al., 2025; Nafiati et al., 2025). This implies the integration of soft skills development across all vocational high school learning activities, not limited to specific subjects, through interactive and participatory approaches, mentoring programs, coaching, business simulations, and role-playing (Zamiri & Esmaeili, 2024).

Combined Relationship (Industrial Practice, Entrepreneurship Learning Outcomes, and Soft Skills) with Entrepreneurial Interest

Together, these three variables have a very strong and significant relationship (simultaneous correlation 0.842; combined contribution 71.0%) with students' entrepreneurial interest. The remaining 29.0% is influenced by other factors. The increase in the coefficient of determination from partial analysis (the highest at 68.30%) to simultaneous analysis (71.0%) indicates a positive synergistic effect between the variables. This means that internships, entrepreneurial learning outcomes, and soft skills do not work separately, but rather reinforce each other in shaping entrepreneurial interest (Acharya et al., 2019). Partial correlation analysis shows the relative contributions after controlling for: entrepreneurial learning outcomes (69.70%), followed by soft skills (46.0%), and internships (26.60%). The dominance of entrepreneurial learning outcomes is explained by cognitive-behavioral theory, where comprehensive knowledge shapes attitudes and self-efficacy. The significant contribution of soft skills highlights their role as enablers that enable the implementation of business ideas. Although internships have the smallest partial contribution, their experiential learning value is irreplaceable, providing practical insights into business operations. These findings support a holistic approach to developing entrepreneurial interest in vocational high school students (Nurryna et al., 2025; Walidayni et al., 2023). Entrepreneurship education programs must systematically and synergistically integrate these three components, balancing theoretical learning, practical experience, and soft skills development. The strategic recommendation is to develop an integrated entrepreneurship education model that includes a comprehensive curriculum, an entrepreneurial-oriented internship program, soft skills learning activities, and a comprehensive evaluation system (Ireland et al., 2023; Farida et al., 2022).

Research Limitations

This research was conducted with great care, but the implementation of the treatment was not without the following limitations: The researcher found it difficult to control the sincerity and truthfulness of the respondents' responses, particularly regarding vocational and filling aspects.

Conclusion

This study examines the contribution of industrial work experience, entrepreneurial learning outcomes, and soft skills to entrepreneurial interest among students of private vocational high schools (SMK) in the Nias Regency Government, finding a positive and significant relationship for each variable. Industrial work experience has a significant positive relationship with entrepreneurial interest (correlation of 0.65; contribution of 42.60%). This indicates that direct experience in industry substantially shapes students' entrepreneurial orientation. The regression equation $\hat{Y} = 0.361 + 0.653\ X_1$ confirms that improving the quality of industrial work experience will proportionally increase entrepreneurial interest. Simultaneously, industrial work experience, entrepreneurial learning outcomes, and soft skills have a very strong and significant relationship with entrepreneurial interest (correlation of 0.84). The combined contribution of these three variables reached 71%, indicating that a holistic approach combining practical experience, theoretical knowledge, and personal skills is optimal in shaping entrepreneurial interest among vocational high school students. The remaining 29.0% is influenced by factors outside the study.

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Author Contributions

Conceptualization, methodology, validation, formal analysis, investigation, resources, data curation, writing—original draft preparation, writing—review and editing, visualization, D.H., M.G., A., and D.I. All authors have read and approved the published version of the manuscript.

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Conflicts of Interest

The researchers funded this research independently.

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