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The Role of Student Engagement in Mediating the Influence of Internships and Entrepreneurship Development Programs on Entrepreneurial Intention: A Case Study at SMKN 1 Ngawi

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Abstract: This study investigates the effect of internship programs and entrepreneurship development on students' entrepreneurial interest, mediated by student engagement. The research involved 74 students of the Digital Business Department at SMKN 1 Ngawi, selected from a population of 90. Using a quantitative approach and Partial Least Squares Structural Equation Modeling (PLS-SEM), the results indicate that both internships and entrepreneurship development have a positive but insignificant effect on entrepreneurial interest, while they significantly enhance student engagement. Moreover, students engagement positively and significantly influences entrepreneurial interest, mediating the indirect effect of internships and entrepreneurship development. These findings suggest that fostering student engagement is crucial for strengthening entrepreneurial interest, emphasizing the need for quality internships and entrepreneurship programs that actively involve students in learning.

Keywords: Internship, Entrepreneurship Development, Students Engagement, Entrepreneurial Intention.

INTRODUCTION

Education, according to the National Education System Law Number 20 of 2003, is defined as a conscious and planned effort to create a learning environment and learning process so that students can actively develop their potential. Through education, students are expected to possess spiritual and religious strength, self-control, personality, intelligence, noble character, and the skills necessary for life in society. (Pristiwanti et al., 2022). Furthermore, education also serves as the primary foundation for the development of individuals and society (Junaedi Ifan, 2019). Individuals can further enhance their potential through education (Qulub, 2019). In the current era, education, skills, and knowledge is essential provisions for navigating life in challenging times. This is evident in the large number of job applicants compared to the limited availability of employment opportunities little work, thing This can result in Lots unemployment. Therefore that, education, ability, and knowledge is something something that is really needed (Makkawaru, 2019).

Vocational High Schools (SMKs) are educational institutions that provide instructions across various majors, aiming to prepare students to become more capable of working in specific fields. The goal of Vocational Schools is to produce graduates who are able to work in accordance with the competencies they have acquired, adapted to the work environment, and performance professionally.

(Setiawansyah et al., 2020; Setiawati & Sudira, 2015). One of the well-known majors in vocational high schools (SMKs) is entrepreneurship. Entrepreneurship is a skill that needs to be instilled in students to form a generation that is creative, innovative, and independent. The purpose of entrepreneurship education for students is to foster a sense of independence, as students who possess independence will be able to undertake various tasks, including facing the challenges of becoming entrepreneurs (Sari et al., 2022). Entrepreneurship education not only involves business knowledge but also aims to build students' self-confidence in confronting failures and future challenges. With strong interest and motivation, students can develop creative ideas that have the potential to create job opportunities both for others and themselves. (Veronica, 2021).

The focus of this study includes internships, entrepreneurship development programs, students engagement, and students' entrepreneurial interest. Each of these aspects plays a crucial role in preparing vocational high school (vocational school) students to enter the workforce or start their own businesses. Internships provide real work experience that equip students with practical skills, while entrepreneurship development programs aim to instill creativity, innovation, and Student independence engagement reflects students' active participation in learning, which serves as an important indicator of success in entrepreneurship education. Thus, the interaction between internship experience, student engagement, and support from entrepreneurship development programs can influence students' entrepreneurial interest. This is essential for producing competent graduates, whether as employees or independent entrepreneurs.

Internships also aim to allow students to engage directly with the working world and face real job challenges. The internship program is designed to apply the knowledge gained and practical gains experience in the real world work settings. The most important aspect of participating in an internship is to produce students who are better prepared for professional work achieved through structured internship activities (Mulia et al., 2023). Students who participate in internship programs gain both knowledge and new insights about the working world and related areas. During the internship, students progress from learning simple tasks to more complex ones. Therefore, through this program, students' skills and knowledge can be further enhanced. (Sitanggang, 2020).

Student engagement refers to students' active involvement in the learning process, encompassing cognitive, emotional, and behavioral aspects. (Depita, 2024). Student engagement refers to the level of students' involvement and participation in learning activities at school, including internship programs, commonly known as Field Work Practice (Praktika Field Work, street vendors), and entrepreneurship programs. Such engagement is crucial because it influences students' motivation and commitment in participating in these programs. Moreover, it allows students to better understand business opportunities, build self-confidence, and maximize the impact of the programs on their entrepreneurial interests. (Eka Nurwidi Astuti & Muhtadin Amri, 2024) Self Determination Theory (SDT) Developed by Deci and Ryan in 2002, this theory provides a strong foundation for understanding how intrinsic motivation can enhance students' level of engagement. The theory explains that students with intrinsic motivation tend to be more enthusiastic and determined to learn, develop skills, and achieve their goals. (Juariyah & Adi, 2017). Students who are intrinsically motivated tend to be more engaged in internship activities, enhance their skills, and achieve accomplishments that support their career goals. (Syafira & Hatta, 2022). Factors influencing student engagement include support from teachers, the relevance of learning materials to the working world, and

opportunities to apply acquired knowledge in practical activities such as entrepreneurship programs and Field Work Practice (PKL). Students who actively participate in PKL and entrepreneurship activities tend to be more successful in developing business skills and better prepared to become entrepreneurs in the future. Furthermore, when students are actively engaged, they are more likely to understand, internalize, and apply what they have learned in their daily lives, including planning their future as entrepreneurs. (Rusmiah et al., 2024). Previous research by Maïke Liu, Marjan J. Gorgievski, Jacques Zwaga, and Fred Paas found that well-designed entrepreneurship programs can enhance student engagement, particularly through strong interpersonal relationships between students and teachers. Programs that provide challenges and are relevant to the working world can increase students' energy, dedication, and involvement in learning. Furthermore, higher engagement contributes to increased entrepreneurial interest, as students feel more prepared and confident to enter the business world after participating in such programs. Student engagement in entrepreneurship programs thus becomes a crucial factor in strengthening students' intention to become entrepreneurs. When students perceive the program as providing meaningful and relevant experiences, they are more likely to develop a stronger intention to start their own business. (Liu et al., 2023). This study supports the assumption that student engagement acts as a mediator in the relationship between entrepreneurship programs and entrepreneurial interest, which aligns with the research model of this study.

Internships, commonly referred to as Field Work Practice (Field Work Practice, PKL) in vocational high schools (SMKs), are programs that provide students with opportunities to work directly in companies or industries. Internship programs are learning activities designed to gain experience that enables students to contribute effectively to society (Nugraheni & Sinatra Wijaya, 2017). This program provides real-world experience that supports the development of practical skills in the workplace, particularly in the field of entrepreneurship. (Ismiatun et al., 2023). Furthermore, the purpose of internships is to enhance students' soft skills, as these skills are essential for helping them enter the industrial and business sectors. Therefore, the experience and skills acquired and developed during internships have significant potential benefits for students in the future. (Juni et al., 2017; Setiarini et al., 2022). For students at SMKN 1 Ngawi, internships offer significant benefits, such as hands-on learning in business management, marketing, and business operations. Moreover, the Field Work Practice (PKL) program helps students prepare for entrepreneurship by providing in-depth insights into the challenges faced in the business world (Desy & Ningsih, 2016). Some of the challenges encountered during the PKL program include insufficient effective supervision at the internship site, difficulties in adapting to the industrial work culture, and limited time allocated for field experience. (Dudang Abdul Karim et al., 2024). Previous research conducted by Syifana Aenuriyas and Mahmeru Rosy Rochmatullah have shown that internship programs and entrepreneurship development have the potential to enhance students' entrepreneurial interest. Internship experiences can improve students' self-efficacy in entrepreneurship (Syifana & Rochmatullah, 2024). Furthermore, a study by Silfi Ufia, Agung Dwi Nugroho, and Tri Wahjoedi stated that internships play a crucial role in enhancing both hard and soft skills (Ufia et al., 2024). Experiential Learning Theory (ELT) Developed by David Kolb in the early 1980s, this theory provides a strong foundation for understanding internships. The theory emphasizes that the learning process is holistic, in which real-world experiences play a central role in shaping individual understanding and knowledge. (Matono et al., 2022). In the context of this study, Experiential Learning Theory is used to explain how internship activities can serve as an effective learning tool for students, particularly in shaping their entrepreneurial interests.

Entrepreneurship development programs are educational initiatives designed to equip students with the knowledge, skills, and attitudes necessary to start and manage their own businesses. (Soputan et al., 2020). The entrepreneurship program at SMKN 1 Ngawi

aims to provide students with practical skills in managing and starting a business. (Hertin et al., 2024). This program includes theoretical lessons on business as well as practical activities that encourage students to think creatively and innovatively in facing the challenges of the business world. The entrepreneurship program at SMKN 1 Ngawi encompasses various components, such as business management training, financial planning, product marketing, and leadership skill development. The program also provides opportunities to work directly with industries to enhance students' technical abilities. Students who have participated in entrepreneurship training tend to have stronger entrepreneurial interests, as they view internships as a strategic step and an initial stage to realize their creative ideas, as well as to develop existing businesses. (Setyawati, 2019). Previous research conducted by Alka Singh Bhatt indicated that the higher the level of student engagement in entrepreneurship activities, such as internships and training, the greater the likelihood of developing entrepreneurial intentions. Student engagement in entrepreneurship programs can strengthen the relationship between these experiences and entrepreneurial interest.

(Bhatt, 2022). Research conducted by Agus Supandi Burhanudin revealed that entrepreneurship development programs and entrepreneurship education have a significant impact on students' motivation. (Supandi & Burhanudin, 2024). Furthermore, a study conducted by Josia Sanchaya Hendrawan and Hani Sirine also found that entrepreneurship education can enhance students' motivation and self-confidence to participate in work-related activities, including internships. (Hendrawan & Sirine, 2017). *Entrepreneurial Theory Education* from Gibb (2020) It provides a strong foundation for understanding entrepreneurship development programs, emphasizing the importance of experiential learning in shaping students' entrepreneurial character and skills. According to Gibb, effective entrepreneurship education not only teaches theory but also encourages students to actively engage in practical activities that reflect the realities of the business world. (Suputra & Sudewa, 2024).

Students' entrepreneurial interest refers to their inclination or intention to engage in practical experiences that enhance their entrepreneurial skills. For students at SMKN 1 Ngawi, this relates to their desire to participate in the field Work Practice (PKL) programs or entrepreneurship programs to prepare themselves for the realities of the business world. Factors influencing students' entrepreneurial interest include their awareness of the importance of real world experiences in developing entrepreneurial skills, encouragement from family and school, and expectations of the long-term benefits of participating in entrepreneurship and PKL activities. Students who are more motivated to become entrepreneurs are more likely to engage in these activities. In this study, students' entrepreneurial interest is defined as their intention to pursue entrepreneurship, not merely the intention to participate in internship programs. Previous research conducted by Sumiati Tahir found that the direct influence of industrial practice experience on entrepreneurial intention may not be significant, but it becomes significant when mediated by supporting variables (Sumiati Tahir, 2023). To understand this intention, the Theory of Planned Behavior (TPB), developed by Ajzen in 1991, is employed. TPB explains that an individual's intention to perform a behavior can be predicted through three main components: attitude toward the behavior, subjective norm, and perceived behavioral control. (Sartika, 2020). Furthermore, Maslow's Hierarchy of Needs Theory, proposed by Abraham Maslow in 1943, is also applied in this study. According to Maslow, an individual is motivated to fulfill higher-level needs only after lower-level needs have been sufficiently satisfied. (A.H.Maslow, 2015). In this context, students will begin to develop an interest in entrepreneurship if their basic needs are secured, such as having sufficient economic stability, support from family and social environment, as well as confidence and drive to grow. Students' entrepreneurial interest can also be analyzed using Herzberg's Motivator-Hygiene Theory, which explains that an individual's motivation to act, including in the workplace and

entrepreneurship, is influenced by two factors: Hygiene Factors and Motivation Factors. Internship and entrepreneurship development programs are indeed designed to enhance students' interest in becoming entrepreneurs aligned with their areas of expertise. (Sugiarto et al., 2015).

However, in reality, many students still perceive these programs as less effective. A considerable number of students remain unemployed due to a lack of relevant skills and experience. (Nugraha & Zen, 2020). In theory, internship and entrepreneurship development programs should equip students with skills that meet the demands of the industrial and business sectors. In reality, many graduates feel that the educational programs they have undergone are not relevant or aligned with the needs of the workforce. (Nurmalasari et al., 2020). Furthermore, low levels of student engagement in these programs are one of the main factors contributing to their unpreparedness in facing job market competition.

Although previous studies have examined the influence of internship programs and entrepreneurship education on entrepreneurial interest, most research has focused on the higher educational level. In fact, Vocational High Schools (SMKs) play a strategic role in preparing young generations to be both work-ready and entrepreneurial from an early stage. Moreover, student engagement is rarely positioned as a mediator variable in explaining how internship experiences and entrepreneurship programs can effectively foster entrepreneurial interest. Therefore, this study introduces novelty by examining student engagement as a key factor bridging the influence of internship and entrepreneurship programs on entrepreneurial interest, particularly in the context of vocational school student. The findings are expected to provide not only theoretical contributions to the development of entrepreneurship education models but also practical implications for schools in designing more participatory learning strategies that are relevant to the needs of the workforce and business world.

Based on the literature review and conceptual framework, this study examines the influence of internships and entrepreneurship education programs on the entrepreneurial interest of SMKN 1 Ngawi students, both directly and through student engagement as a mediation variables. Internships are considered capable of enhancing students' practical experience and understanding of the working world, thereby expected to contribute positively to entrepreneurial interest while also increasing their engagement in the learning process. Similarly, entrepreneurship education programs are designed to develop students' entrepreneurial competencies and insights, which are hypothesized to directly enhance entrepreneurial interest and strengthen student engagement in both academic and non-academic activities. Furthermore, students engagement as a mediation variable is believed to play a crucial role in channeling the influence of internships and entrepreneurship education programs on entrepreneurial interest, so that students who are more active and engaged tend to have higher motivation and readiness to pursue entrepreneurship. Therefore, this study focuses on testing the direct and indirect effects of internships and entrepreneurship education on entrepreneurial interest through student engagement as a mediator.

METHOD

The research approach used in this study is quantitative. The type of research is ex post facto. Ex post facto research is conducted to trace the causes of an event that has already occurred, where the independent variables cannot be manipulated because they occurred prior to the start of the study (Zafri & Hastuti, 2021). The variables used in this study are internships (X1), entrepreneurship development programs (X2), student engagement (Z), and entrepreneurial interest (Y). In SmartPLS, the internship variable is labeled as MG (X1), the entrepreneurship development program variable as PPK (X2), the student engagement variable as SE (Z), and the entrepreneurial interest variable as MB (Y) to facilitate the coding of indicators. This study was conducted at SMKN 1 Ngawi, with a total population of 90 students

in the 12th grade of the Digital Business major. The sample used consisted of 74 students. The reason for selecting only 12th-grade students from the Digital Business major is that only this class has participated in both the theoretical and practical entrepreneurship development programs and has also completed the internship (PKL) program. This study employs Partial Least Squares Structural Equation Modeling (PLS-SEM) to examine the relationships among variables, using SmartPLS 3.0. The SEM method is considered capable of providing deeper analysis and prediction of the research model compared to path analysis and multiple regression. (Handayani et al., 2019).

RESULTS AND DISCUSSION

This study was conducted on 12th-grade students of SMKN 1 Ngawi from the Digital Business major. These students were enrolled in the Creative Products and Entrepreneurship courses. The total number of respondents in this study were 74 students, determined using Slovin's formula. The sample size calculated using Slovin's formula depends on the predetermined margin of error; the larger the margin of error, the smaller the required sample size. (Riyanto & Putera, 2012). The following is a description of the calculation of the number of respondents used in this study.

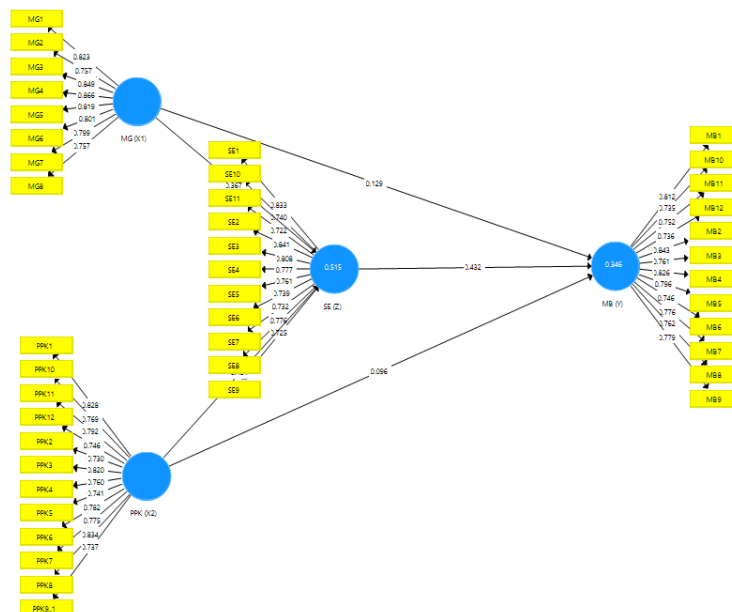
Table 1. Population Table

Class	Sample	Respondents
Digital Business 1	$30/90 \times 74 = 24.6$	25
Digital Business 2	$32/90 \times 74 = 26.3$	26
Digital Business 3	$28/90 \times 74 = 23.0$	23
TOTAL		74 Student

Source: Research Data, 2025

Measurement Model (Outer Model)

The data obtained from the respondents were then analyzed by conducting tests of convergent and discriminant validity. In addition, the reliability of the instruments was tested using Composite Reliability and Cronbach's Alpha. The results of the analysis were presented through SmartPLS output.



Source: Research Data, 2025

Figure 1. Loading Factor

Validity measurement was conducted by examining the loading factor of each item. A good loading factor value is above 0.7 (Supriadi & Artanti, 2025). Based on the analysis results, all items in this study had loading factor values above 0.7, indicating that they are valid. Convergent validity was also assessed using the Average Variance Extracted (AVE), which is considered valid if the value is ≥ 0.5 . In addition, construct reliability was evaluated by examining Cronbach's Alpha and Composite Reliability values. A variable is considered reliable if its Cronbach's Alpha value is above 0.70 or at least close to this threshold. (Supriadi & Artanti, 2025). The Cronbach's Alpha, Composite Reliability, and AVE values are presented in the following table.

Table 2. Construct Table Reliability and Validity

Construct	Cronbach's Alpha	Rho_A	Composite Reliability	AVE
Interest in Entrepreneurship (Y)	0.941	0.949	0.948	0.605
Internship (X1)	0.925	0.933	0.938	0.656
Entrepreneurship Development Program (X2)	0.941	0.949	0.948	0.604
Student engagement (Z)	0.931	0.937	0.941	0.592

Source: Research Data, 2025

As presented in Table 2, all constructs have AVE values above 0.5, indicating that convergent validity is fulfilled. Additionally, the Cronbach's Alpha, Rho_A, and Composite Reliability values for each constructs are also high, exceeding 0.70. This implies that the instruments used in this study possess a high level of reliability. With AVE values above 0.5 and high reliability values, it can be concluded that the research instruments meet the requirements for convergent validity and construct reliability. Therefore, the instruments are considered suitable for use in the subsequent analysis stage.

Table 3. Discriminant Table Validity

	Interest in Entrepreneurship (Y)	Internship (X1)	Entrepreneurship Development Program (X2)	Student Engagement (Z)
Interest in Entrepreneurship (Y)	0.778			
Internship (X1)	0.441	0.810		
Entrepreneurship Development Program (X2)	0.443	0.522	0.777	
Student Engagement (Z)	0.572	0.605	0.646	0.770

Source: Research Data, 2025

Discriminant validity is crucial aspect in evaluating a measurement model, aimed at ensuring that each construct in the model truly measures a distinct concept and does not overlap with others. In other words, discriminant validity assesses the extent to which indicators can differentiate one construct from another. One commonly used method to assess discriminant validity is the Fornell-Larcker criterion. According to to this approach, the square root of the Average Variance Extracted (AVE) for each construct should be greater than its correlations with other constructs in the model. Meeting this criterion indicates that the variable has a stronger internal association compared to its external relationships with other constructs.

As presented in Table 3, the square root of the AVE for each construct is greater than its correlations with other constructs. This is evidenced by the Entrepreneurial Interest (Y) correlation value of 0.778, which is higher than its correlations with other variables (X1 = 0.441; X2 = 0.443; Z = 0.572). The Internship (X1) correlation value is 0.810, exceeding its correlations with other variables (X2 = 0.522; Z = 0.605).

The Entrepreneurship Development Program (X2) correlation value is 0.777, higher than its correlation with Student Engagement (Z = 0.646). The Students Engagement (Z) correlation value is 0.770, greater than its correlations with other variables (Y = 0.572; X1 = 0.605; X2 = 0.646). Based on these results, it can be concluded that there are no issues with discriminant validity, indicating that subsequent analyses can be conducted with confidence that the measurement model meets the required standards.

Measurement Model (Inner Model)

The inner model was evaluated by examining R², Effect Size (F²), and Predictive Relevance (Q²), which together assess the models explanatory power, the contribution of each predictor, and its ability to accurately predict observed outcomes.

Table 4. R Square (R²) Table

	<i>R Square</i>	<i>R Square Adjusted</i>
Interest in Entrepreneurship (Y)	0.346	0.321
Student Engagement (Z)	0.515	0.503

Source: Research Data, 2025

R Square (R²) is used to assess the extent to which a particular independent latent variable influences the dependent latent variables. R² values are categorized into three levels: 0.67 indicates a strong effect, 0.33 indicates a moderate effect, and 0.19 indicates a weak effect. (Supriadi, 2022).

As presented in Table 4, the Entrepreneurial Interest (Y) variable has an R² value of 0.346. This indicates that the three predictors of entrepreneurial interest Internship (X1), Entrepreneurship Development Program (X2), and Student Engagement (Z)— collectively account for 34.60% of the variance, while the remaining 65.40% is influenced by other variables outside the research model. The combined effect of these three variables on Entrepreneurial Interest (Y) falls into the moderate category (34.60% > 33.3%). Furthermore, the Student Engagement (Z) variable has an R² value of 0.515, indicating that the two predictors of Student Engagement Internship (X1) and Entrepreneurship Development Program (X2)— together explain 51.50% of the variance, which is also categorized as a moderate effect (51.50% > 33.3%), with the remaining 48.50% influenced by other variables outside the research model.

Table 5. F Square Table (F²)

	Interest in Entrepreneurship (Y)	Internship (X1)	Program (X2)	Student Engagement (Z)
Interest in Entrepreneurship (Y)				
Internship (X1)	0.016			0.203
Entrepreneurship Development Program (X2)	0.008			0.309
Student Engagement (Z)	0.138			

Source: Research Data, 2025

F Square (F²) is used to assess the magnitude of the effect of each independent variable on the dependent variables. F² values are categorized into three levels: 0.35 indicates a strong effect, 0.15 indicates a moderate effect, and 0.02 indicates a weak effect (Supriadi, 2022). As presented in Table 5, the strongest variable in predicting Entrepreneurial Interest is Student

Engagement (Z), with an F^2 value of 0.138, categorized as small (<0.15). Conversely, the weakest variable in predicting Entrepreneurial Interest is the Entrepreneurship Development Program (X2), with an F^2 value of 0.008, also categorized as small (<0.15).

Table 6. Construct Table Cross-validated Redundancy

	SSO	SSE	$Q^2 (=1-SSE/SSO)$
Interest in Entrepreneurship (Y)	972,000	786,852	0.190
Internship (X1)	648,000	648,000	
Entrepreneurship Development Program (X2)	972,000	972,000	
Student Engagement (Z)	891,000	632,068	0.291

Source: Research Data, 2025

The Predictive Relevance Q^2 value is employed to assess the predictive capability of the research model. According to Supriadi (2022), Q^2 values can be interpreted at three levels: a value of 0.35 denotes strong predictive relevance, 0.15 indicates moderate predictive relevance, and 0.02 represents weak predictive relevance. As shown in Table 6, all Q^2 values exceed the minimum cut-off point (>0.00), suggesting that all constructs in the study possess adequate predictive capability for enhancing Entrepreneurial Interest (Y) and Student Engagement (Z). Specifically, the Q^2 results in Table 6 reveal a value of 0.190 for Entrepreneurial Interest (Y) and 0.291 for Student Engagement (Z), both of which fall below 0.35 and are thus classified as having moderate predictive relevance. Consequently, the proposed research model is capable of explaining approximately 19% to 29.10% of the observed phenomena. In summary, the model demonstrates a reasonable predictive ability, indicating that the three variables collectively account for up to 29.10% of the actual conditions related to entrepreneurial interest in the field.

Hypothesis Testing

Table 6. Path Table Analysis

	Original Sample (O)	T Statistics	P Value	Information	Hypothesis Decision
X1 -> Y	0.129	0.801	0.424	Not Significant	Rejected
X1 -> Z	0.367	3,507	0,000	Significant	Accepted
X2 -> Y	0.096	0.626	0.532	Not Significant	Rejected
X2 -> Z	0.454	4,424	0,000	Significant	Accepted
Z -> Y	0.432	2,439	0.015	Significant	Accepted
X1 -> Z -> Y	0.159	1,736	0.083	Not Significant	Rejected
X2 -> Z -> Y	0.196	2,344	0.083	Not Significant	Rejected

Source: Research Data, 2025

H1: Internship (X1) Has a Positive but Insignificant Influence on Entrepreneurial Interest (Y) of Students at SMKN 1 Ngawi

The T- statistic result of $0.801 < 1.96$ and a P- value of $0.424 > 0.05$ indicates that the first hypothesis is not supported, meaning there is no significant effect of internships on

students' entrepreneurial interest. This May occur because the internship activities attended were not specifically directed at fostering students' motivation or interest in entrepreneurship.

Internships are often perceived merely as a process to fulfill academic requirements without direct entrepreneurship guidance, thus not quite impacting students' intention to engage in entrepreneurship. Plus, some students May feel unprepared to enter the business world due to limited experience, skills, or capital (Liu et al., 2023). Therefore, it is necessary to strengthen the entrepreneurial aspect of internship activities, for example, by assigning students to independently manage small projects during their internship.

This result is not consistent with David Kolb's Experiential Learning Theory (ELT), which positives that direct experiences, such as internships, should enhance students' interest and motivation. (Matono et al., 2022) This discrepancy may be due to the implementation of the internship not fully reflecting the principles of the theory. In the context of ELT, the ideal learning experience should not occur passively but should also involve reflection, conceptual understanding, and application in real situations. If these elements are not optimally present in the internship activities, it is understandable that the impact on students' entrepreneurial interest is not yet significant. Therefore, a collaborative effort between the school and industry partners is necessary to develop internship programs that not only provide work experience but also facilitate active learning that fosters students' enthusiasm and interest in entrepreneurship.

H2: Internship (X1) Has a Significant Positive Influence on *Students Engagement (Z)* of Students of SMKN 1 Ngawi

The T- statistic result of $3,507 > 1.96$ and a P- value of $0.000 < 0.05$ indicates that the second hypothesis is supported, meaning there is a positive and significant effect of internships on student engagement. This suggests that the better the implementation of internships attended by students, the higher their engagement in learning and future-oriented activities, including entrepreneurship.

Students who participate in internships gain real- world work experience, which encourages them to be more active, responsible, and motivated in the learning process at school. These findings support David Kolb's experiential learning theory, which positives that direct experiences can enhance students' engagement emotionally, cognitively, and behaviorally.

This study also reinforces the findings of Silfi Ufia, Agung Dwi Nugroho, and Tri Wahjoedi, who stated that internships play a crucial role in enhancing students' hard and soft skills. Strengthening these skills is an important factors in preparing individuals to face the workforce. Thus, internship experiences not only promote student engagement in the learning process but also equipment them with relevant competencies for the future, including readiness for entrepreneurship (Ufia) et et al., 2024).

H3: The Entrepreneurship Education Program (X2) Has a Positive but Insignificant Influence on the *Entrepreneurial Interest (Y)* of Students at SMKN 1 Ngawi

The T- statistic result of $0.626 < 1.96$ and a P- value of $0.532 > 0.05$ indicate that the third hypothesis is rejected, meaning there is no significant effect of the entrepreneurship education program on students' entrepreneurial interest. Although students have participates in entrepreneurship learning at school, this does not necessarily foster a strong interest in becoming entrepreneurs. This May be due to the learning being more theoretical and lacking practical or hands-on experience, which limits its ability to motivate students to engage in actual entrepreneurial activities.

These results do not support Ajzen's (2005) Theory of Planned Behavior, which states that knowledge and attitudes influence behavioral intentions (Sartika, 2020). However, conceptually, these findings are still consistent with the study by Agus Supandi and

Burhanudin, which emphasizes the importance of entrepreneurship development programs in fostering students' motivation and entrepreneurial interest, even though in this study the effect was not statistically significant (Supandi & Burhanudin, 2024).

H4: Entrepreneurship Education Program (X2) Has a Significant Positive Influence on Students Engagement (Z) of Students of SMKN 1 Ngawi

T- statistic results of $4.424 > 1.96$ and the P- value of $0.000 < 0.05$ indicate that the fourth hypothesis is accepted, meaning that there is a positive and significant influence between the entrepreneurship education program and student achievement. Student engagement. This program is able to stimulate student engagement in the learning process because they are encouraged to think creatively, work together in teams, and solve real problems that exist in the business world. The more interesting and applicable the material presented, the more active and motivated students will be. This finding is in line with Deci & Ryan's Self-Determination theory, which states that student engagement will increase if their basic needs for competence, autonomy, and connectedness are met in learning activities (Juariyah & Adi, 2017). This study also supports the findings of Josia Sanchaya Hendrawan and Hani Sirine that entrepreneurship education increases students' motivation and confidence to engage in world-of-work activities, including internships (Hendrawan & Sirine, 2017).

H5: Student Engagement (Z) Has a Significant Positive Influence on Entrepreneurial Interest (Y) of Students at SMKN 1 Ngawi

The T- statistic result of $2.439 > 1.96$ and a P- value of $0.015 < 0.05$ indicate that the fifth hypothesis is supported, meaning there is a positive and significant effect of student engagement on students' entrepreneurial interest.

When students are active engaged in the learning process, both emotionally and cognitively, they become more open to new ideas, including entrepreneurial High opportunities engagement fosters self-confidence, initiative, and risk-taking, all of which are indicators of entrepreneurial interest.

These results support Self-Determination Theory and Ajzen's theory, indicating that engagement and positive attitudes in learning can foster behavioral intentions, in this case, entrepreneurship (Juariyah & Adi, 2017). The support for these theories demonstrates that student engagement in the learning process plays a crucial role in shaping entrepreneurial interest. When students feel emotionally and cognitively involved, they tend to be more motivated, confident, and open to new opportunities, including in the entrepreneurial domain. Therefore, enhancing student engagement in the school environment can be a strategic step to cultivate entrepreneurial spirit from an early stage.

H6: Internship (X1) Has an Indirect Positive Influence through Student Engagement (Z) towards Entrepreneurial Interest (Y) of Students of SMKN 1 Ngawi

The T- statistic result of $1.736 < 1.96$ and a P- value of $0.083 > 0.05$ indicate that the sixth hypothesis is rejected, meaning the indirect effect of internships on students' entrepreneurial interest through student engagement is not significant.

Although internships can enhance student engagement, this engagement has not been strong enough to significantly stimulate students' entrepreneurial interest. This May be because the type of engagement developed is not sufficient deep or has not been specifically directed toward entrepreneurial activities. These studies differ from Kolb's Experiential Learning Theory, which suggests that experiences drive engagement and intentions (Matono et al., 2022). However, these findings align with the study by Sumiati Tahir, which found that the direct effect of industrial practice experience on entrepreneurial intention was not significant, but became significant when mediated by self-efficacy. Although a different mediator was

used, these results reinforce that internal factors such as engagement or self-confidence play a crucial role in bridging real- world experience with entrepreneurial intention (Sumiati Tahir, 2023).

H7: Entrepreneurship Education Program (X2) Has an Indirect Positive Influence through *Student Engagement* (Z) towards Entrepreneurial Interest (Y) of Students of SMKN 1 Ngawi

The T- statistic result of $2,344 > 1.96$ but with a P- value of $0.083 > 0.05$ indicates that although the T- statistic has exceeded the threshold, the seventh hypothesis is still rejected because the P- value is above 0.05. This means that the indirect effect of the entrepreneurship education program on students' entrepreneurial interest through student engagement is not statistically significant.

This indicates that student engagement in entrepreneurship learning is not yet strong enough to mediate its effect on entrepreneurial interest. Students May be engaged cognitively or emotionally, but they have not been sufficiently motivated to translate this engagement into concrete intention to pursue entrepreneurship.

These findings contradict Deci & Ryan's Self-Determination Theory, which states that student engagement can serve as an important mediator in enhancing entrepreneurial interest (Juariyah & Adi, 2017). Nevertheless, these results provide an important note that engagement must be deep and not merely passive participation in order to effectively bridge education and entrepreneurial intention.

CONCLUSION

Based on the findings of this study, it can be concluded that internships have a positive but non- significant effect on the entrepreneurial intention of students in the Digital Business program at SMKN 1 Ngawi. Internships, however, exert a positive and significant influence on student engagement. Similarly, entrepreneurship education programs positively, yet insignificantly, affect students' entrepreneurial intentions, while they have a positive and significant impact on student Student engagement engagement itself has a positive and significant effect on entrepreneurial intention. Moreover, internships indirectly influence entrepreneurial intention through student engagement, and entrepreneurship education programs also exert a positive indirect effect on entrepreneurial intention via student engagement.

This study has certain limitations, particularly in scope, as it did not examine all potential variables that might affect entrepreneurial intention. The research focused only on internships, entrepreneurship education programs, and student engagement.

The researcher focused solely on the 12th-grade Digital Business program at SMKN 1 Ngawi, Rather than including all departments within the school. To foster students' entrepreneurial intentions, SMKN 1 Ngawi is encouraged to enhance the quality of out-of-classroom education by strengthening internships and entrepreneurship education programs that are both practical and aligned with the business and industrial sectors. Additionally, the school should promote greater student engagement through activities that actively involve students, such as entrepreneurial projects and business training. Involving entrepreneurial alumni as mentors can also serve as an effective strategy to inspire and motivate Students. Future research is recommended to incorporate additional variables influencing entrepreneurial intention and to broaden the scope of respondents, thereby producing more comprehensive and generalizable findings.

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