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Unveiling the Pathways from Parenting to Entrepreneurship: A Structural Equation Modeling Approach

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Abstract

This study investigates how parenting styles influence vocational students' entrepreneurial intentions and career choices, considering self-efficacy and entrepreneurial attitudes as mediating variables. Using a quantitative approach, data were collected from 381 vocational school students and analyzed with Structural Equation Modeling (SEM) using AMOS 24. The participants consisted of 55.7% females and 44.3% males, representing families from low-, middle-, and high-income groups based on the 2024 Jakarta provincial minimum wage, with parents working as civil servants, private-sector employees, entrepreneurs, and others. The results indicate that authoritative parenting positively fosters entrepreneurial intentions and encourages students to pursue entrepreneurship as a career path. Furthermore, the mediating roles of self-efficacy and entrepreneurial attitudes are confirmed, providing a clearer explanation of how parenting influences entrepreneurial career decisions. The study contributes theoretically by extending models of entrepreneurial intention with family socialization factors, and practically by offering a tested framework to guide efforts in promoting entrepreneurship among vocational students.

Keywords: Parenting Styles, Self-Efficacy, Entrepreneurship Attitudes, Entrepreneurship Intention, Entrepreneurship Career Choice

1. Introduction

Vocational High Schools are designed to prepare graduates with competencies relevant to industry demands, enabling direct entry into the workforce. Despite these aims, not all graduates succeed in securing employment. According to the Central Bureau of Statistics of the Republic of Indonesia (BPS RI), as of February 2024 the unemployment rate among vocational high school graduates was the highest across all education levels, reaching 9.01%, compared with 7.05% for senior high school graduates and 4.83% for diploma holders [1]. These national figures reveal a macro-level job difficulty while also underscoring the micro-level consequences for vocational students confronting uncertainty in career preparedness. The consistently elevated unemployment rate among this demographic suggests that the problem is not just attributable to labor market conditions, but also to personal and familial influences that shape students' career perspectives and entrepreneurial goals. Several factors contribute to this condition, including students' shifting career aspirations, selective attitudes toward available jobs, difficulties in aligning personal potential with occupational demands, and the mismatch between acquired skills and labor market requirements [2], [3]. Moreover, the limited availability of employment opportunities further exacerbates the problem. Entrepreneurship has therefore become a crucial area of concern in national development. Entrepreneurs play a key role in promoting economic growth and reducing unemployment in Indonesia [4].

Indonesian people's awareness of the importance of entrepreneurship is still quite low when compared to other nations around the world [5]. Vocational high schools are expected to play several roles including the encouragement of

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entrepreneurship, therefore fulfilling the function of national education in several spheres. Reducing unemployment can be achieved by promoting entrepreneurial intention, therefore inspiring students to take entrepreneurship into serious thought as a suitable career path [5]. Research by Douglas and Shepherd [6] also highlighted that encouraging entrepreneurial activity is important to address the employability issue. An extensive study has been conducted globally on the contribution of parenting in fostering students' entrepreneurial intentions and career choices [7], [8]. One initiative to promote entrepreneurship among vocational graduates involves enhancing their interest and awareness in this field. Based on Ajzen's Theory of Planned Behavior (TPB) [9], entrepreneurial intention is the most reliable predictor of entrepreneurial behaviors; thus, low entrepreneurial intention correlates with diminished entrepreneurial activity, resulting in fewer entrepreneurs and new job opportunities. Recent studies have further extended TPB in the context of entrepreneurship education, confirming its relevance in explaining how attitudes, perceived behavioral control, and self-efficacy influence students' entrepreneurial learning and intention formation [10]. St-Jean and Mathieu [11] contend that a positive disposition towards entrepreneurship might augment the entrepreneurial intent and inspire students to seek jobs as entrepreneurs, with efficacy acting as a mediating variable. Anjum et al. [12] highlighted that intention is critical for motivating individuals to pursue a entrepreneurial career. Bloemen-Bekx et al. [13] elucidated in their research that parenting style can foster students' intentions to pursue careers as entrepreneurs.

Despite the fact that self-efficacy and perceived attitudes are the most important drivers of intention, it is considered that the interaction between parenting styles has an effect on students' intentions regarding entrepreneurship and career choices [14]. Several studies conceptualize attitudes and efficacy as intervening factors because of their position in person's internal factors. For example study by Igwe et al. [15] and Svotwa et al. [16] indicates that parenting styles may influence entrepreneurial intentions and career choices, mediated by self-efficacy and attitudes toward entrepreneurship. The absence of enthusiasm among students towards perceiving entrepreneurship as a viable career option, coupled with the elevated unemployment rate, presents challenges that necessitate careful consideration and resolution. Although numerous studies have explored different strategies to promote entrepreneurial careers, there is still a significant lack of research examining how parental involvement can enhance students' intention to become entrepreneurs and support their career decision-making processes in this field. For example, Gralewski and Jankowska [17] examined parenting styles as factors influencing students' creative abilities and beliefs, showing their importance for future aspirations, yet without linking these styles to entrepreneurial career choices. Similarly, Adha et al. [4] developed a model to guide students in preparing for entrepreneurial careers during college, but their focus was limited to career planning rather than the psychological mechanisms that lead to entrepreneurial decisions. Rodriguez and Lieber [18] emphasized that students' attitudes toward entrepreneurship strongly influence their likelihood of pursuing entrepreneurial careers, but their study did not incorporate the role of family factors such as parenting.

Taken together, previous studies suggest that parenting styles, entrepreneurial attitudes, and related factors have often been examined separately, with limited research integrating them into a single framework. In particular, the mediating roles of self-efficacy and entrepreneurial attitudes in explaining how parenting influences entrepreneurial intentions and career choices remain underexplored. Accordingly, this study aims to develop and empirically test a comprehensive model that examines the role of parenting styles as predictors of entrepreneurial career choices, with self-efficacy and entrepreneurial attitudes as mediating variables. Theoretically, this study extends prior work by positioning parenting styles as a predictor of entrepreneurial career choice while introducing entrepreneurial attitudes and self-efficacy as mediating variables. Practically, the study provides insights for stakeholders—particularly parents and schools—on strategies to foster entrepreneurial attitudes and self-efficacy that can encourage vocational high school students to pursue entrepreneurship as a viable career path.

2. Literature Review

2.1. Parenting Styles (PS) and Entrepreneurship Career Choices (ECC)

Parenting is a key factor in shaping children's development, particularly while addressing career choices for entrepreneurs [19]. An authoritative parenting style is an approach that includes elements of control balanced with responsiveness to the child's needs [20]. Research that investigates the association between authoritative parenting styles and entrepreneurial occupations has specifically focused on authoritative parenting styles [21]. The authoritative parenting style involves a combination of clear and consistent rules with a high level of emotional support. Parents

who adopt this style offer suitable direction while simultaneously allowing children the freedom to investigate and make choices [22]. Studies have consistently demonstrated that an authoritative parenting style makes a significant contribution to child development [23], [24]. Children nurtured within an authoritative environment tend to show characteristics such as independence, high self-confidence, good social skills, and strong intrinsic motivation to achieve their goals [20]. Studies show that children who grow up in authoritative environments tend to have a greater tendency to choose an entrepreneurial career compared to individuals raised in other parenting styles [25]. Children who are raised in an environment that provides freedom of responsibility, encourages initiative, and values autonomy tend to have a greater interest in entrepreneurial careers. Numerous studies have consistently demonstrated the positive impact of authoritative parenting on students' psychological development, learning engagement, and entrepreneurial outcomes [21], [24]. However, some scholars have presented conflicting evidence concerning the effects of permissive and authoritarian parenting. Kuppens and Ceulemans [22] demonstrated that permissive parenting may enhance creativity and risk-taking behaviors, which are critical characteristics in entrepreneurship. Pinquart and Gerke [26] noted that authoritarian parenting may influence persistence and achievement orientation within particular cultural contexts. The mixed findings indicate that the effects of parenting styles are context-dependent, shaped by cultural values, family dynamics, and individual resilience. This study examines authoritative parenting as it corresponds with collectivist cultural traits and fosters autonomy and responsibility, which are essential factors for entrepreneurial intention among Indonesian vocational students. According to this explanation, hypothesis 1 are as follows:

H1: Parenting styles (PS) have a direct and significant effect on entrepreneurial career choices (ECC)

2.2. Entrepreneurship Intention (EI)

Entrepreneurship intention is a person's tendency or desire to engage in entrepreneurial activity or run their own business [12]. Intention is an important first step before a person actually enters the entrepreneurial world. Intention is often an important early indicator in analyzing one's potential to engage in entrepreneurship activities. In many cases, strong intentions can be the trigger for individuals to seek out opportunities, learn, and develop the skills necessary to start and manage their business [27]. The way parents approach parenting is a significant factor that impacts entrepreneurial intentions, ultimately shaping students' decisions to pursue entrepreneurship [22]. The futures of students can be significantly impacted by the parenting methods of their parents [14]. According to Jiang et al. [28], parents can act as role models or examples and have a big impact on an entrepreneur's aim. Accordingly, parenting practices have an impact on adolescents' willingness to participate in business ventures [29]. Students who aspire to be entrepreneurs require the encouragement and guidance of family members, especially their parents. A child's career choice can be triggered by their parents' work, because children want to do what their parents do. For example, parents who become entrepreneurs will inspire their children to have a career as entrepreneurs. Hence, the second hypothesis in this research are as follows:

H2: Parenting styles (PS) have an indirect effect on entrepreneurial career choices (ECC) through entrepreneurial intentions (EI)

2.3. Self-Efficacy (SE)

Self-efficacy denotes an individual's confidence in their capacity to effectively execute tasks and attain objectives [30]. Individuals possessing high self-efficacy demonstrate increased confidence and persistence in achieving career-related tasks, while those with low self-efficacy tend to be hesitant and risk-averse [31]. Self-efficacy improves an individual's ability to initiate actions, navigate challenges, and sustain motivation in the pursuit of career goals [32]. In the context of entrepreneurship, self-efficacy denotes an individual's confidence in their capacity to initiate and oversee a business, which plays a crucial role in shaping entrepreneurial decisions and behaviors [3], [33]. Prior research indicates that authoritative parenting, defined by warmth, support, and clear guidance, positively influences the development of self-efficacy in children [17], [20]. This parenting approach promotes autonomy, responsibility, and confidence, thereby enhancing entrepreneurial tendencies [29]. Authoritative parenting can indirectly influence students' entrepreneurial career choices by enhancing self-efficacy. This study proposes two mechanisms to elucidate the impact of parenting on entrepreneurial career choices. The initial pathway posits self-efficacy as a singular mediator, suggesting that individuals with high confidence are more inclined to convert parental support into tangible entrepreneurial career choices. The second pathway employs a serial mediation framework, indicating that self-efficacy initially enhances

entrepreneurial intention, which then influences the decision to pursue a career in entrepreneurship. This distinction is consistent with the TPB [9], which posits that perceived behavioral control (self-efficacy) directly influences behavior and also indirectly affects intention formation. Therefore, third and fourth hypothesis in this research are:

H3: Parenting styles (PS) have an indirect effect on entrepreneurial career choices (ECC) through self-efficacy (SE)

H4: Parenting styles (PS) have an indirect effect on entrepreneurial career choices (ECC) through self-efficacy (SE) and entrepreneurial intentions (EI)

2.4. Entrepreneurship Attitudes (EA)

Attitude refers to a predisposition to respond positively or negatively towards individuals, organizations, objects, or events [9]. Because one's attitude is evaluative, this means that one's attitude is related to how one evaluates an object; if one believes that the object is beneficial, then they will have a positive attitude toward it (like). Conversely, if the object does not provide benefits, then he does not support (dislike) the object. This study examines student attitudes towards entrepreneurship. Attitudes toward behavior, subjective norms, and perceived behavioral control are the factors that drive intention, according to TPB's theory [34]. This study focuses on assessing entrepreneurship attitudes as a career choice for students, thus emphasizing attitude as a predictor of intention [35]. In the Indonesian context, vocational high school students are equipped with practical skills and technical competencies designed to prepare them for the world of work. Beyond immediate employment opportunities, these competencies also provide a strong foundation for entrepreneurial endeavors. Developing a positive entrepreneurial attitude can therefore expand students' career options, enabling them not only to seek jobs but also to create new opportunities through entrepreneurship [36].

There are some studies showing that authoritative parenting style can influence one's attitude and intention in choosing an entrepreneurial career [37]. Children who are raised in an environment that supports and facilitates exploration and decision-making, as is the case with authoritative parenting style, tend to have a good attitude about starting their own business. Individuals' attitudes towards entrepreneurship have a significant role in shaping their intentions to engage in entrepreneurship activities [13]. Research also shows that children raised in an environment that provides controlled freedom to explore and take initiative in solving problems often exhibit a greater inclination to choose a career in entrepreneurship in adulthood [29]. The link between authoritative parenting style and entrepreneurship intention is likely to be through the formation of positive entrepreneurial attitudes. A study conducted by Staniewski and Awruk [38] confirmed that individuals who are parented with authoritative parenting style tend to have strong entrepreneurial attitudes, which consequently enhances their intention to pursue entrepreneurial endeavors. Research indicates that an authoritative parenting style correlates positively with attitudes toward entrepreneurship and intentions to engage in entrepreneurial activities, subsequently guiding individuals toward careers in entrepreneurship. Thus, the following are the fifth and sixth hypothesis in this study.

H5: Parenting styles (PS) have an indirect effect on entrepreneurial career choices (ECC) through entrepreneurial attitudes (EA)

H6: Parenting styles (PS) have an indirect effect on entrepreneurial career choices (ECC) through entrepreneurial attitudes (EA) and entrepreneurial intentions (EI)

3. Methodology

3.1. Design

There are five variables in this study, as illustrated in figure 1, namely Parenting Styles (PS), Self-Efficacy (SE), Entrepreneurial Attitudes (EA), Entrepreneurial Intentions (EI), and Entrepreneurial Career Choices (ECC). The hypothesized model proposes that parenting styles directly shape students' entrepreneurial career choices and indirectly influence them through psychological mediators. Specifically, PS is expected to enhance SE by fostering confidence and resilience, which in turn strengthens EA. Both SE and EA are theorized to contribute positively to EI, ultimately leading to ECC. This framework highlights the sequential role of self-efficacy, attitudes, and intentions as mediating mechanisms that explain how parenting practices translate into actual career decisions. By employing Structural

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Equation Modeling (SEM), this study examines the direct and indirect influence paths among these variables [39], allowing for a comprehensive evaluation of the structural relationships proposed in figure 1.

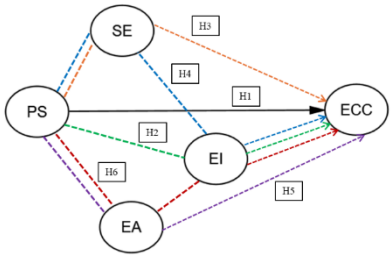

Figure 1. Theoretical Framework Model

3.2. Participants and Data Collection

The population of this study comprises vocational high school students in the Jakarta province, Indonesia. Area proportional random sampling was utilized to select the sample. Area sampling was used to determine the grouping of regencies/cities in the Jakarta, namely the northern, central and southern regions. Within each region, one regency/city was selected to represent the area, and the number of students drawn from each regency/city was determined proportionally to the student population size. The total population in this study was 32,418 students, with the sample size is 381 students based on the Cohen et al. [40] formula, with a 95% confidence level. The sample size estimation considered both representativeness and feasibility to ensure adequate statistical reliability and practical implementation during data collection. Description about the population and sample that was used in this research can be found in table 1. This study examined the demographic characteristics of the participants to provide a clearer overview. Out of the 381 vocational high school students who participated in the study, 55.7% were female and 44.3% were male. Families of respondents were divided into three income groups based on the 2024 Jakarta provincial minimum wage (UMP) of Rp 5,067,381 per month: low-income (less than Rp 5,000,000; 24.2%), middle-income (between Rp 5,000,001 and Rp 10,000,000; 53.5%), and high-income (more than Rp 10,000,000; 22.3%). Concerning the occupational background of parents, 38.5% were employed in the private sector, 21.2% were civil servants, military personnel, or police officers, 27.3% were entrepreneurs or self-employed, and 13.0% fell into other categories (e.g., housewives, retired parents, etc.).

Table 1. Population and Sample

Area	Regency/City	Sample Regency/City	Population	Sample
northern	1. North Jakarta 2. Seribu Islands	North Jakarta	2601	31
central	1. Central Jakarta 2. West Jakarta	Central Jakarta	8196	96
southern	1. South Jakarta 2. East Jakarta	East Jakarta	21621	254
Total			32418	381

The four-item PS scale was derived based on indicators of authoritative parenting styles by Schmitt-Rodermund [7] including monitoring, decision-making in the family, warmth, and authority. Examples of items from the PS scale include; “my parents provide guidance in spending money” (PS2); and “my parents support me when I have problems” (PS3). The three-item SE measurement scale was derived from Bandura [30], [41] indicators of strength (the degree of confidence), generality (the breadth of the behavior), and magnitude (the degree of difficulty of the task). An illustration of an item from the SE scale is "with the help of my skills and passions, I am able to realize my objectives" (SE2). The EA measurement instrument, consisting of three items, was constructed in accordance with the indicators utilized in the study by Liñán and Chen [42]: attitudes toward autonomy, attitudes toward challenges, and attitudes toward achievement. Examples of items from the EA scale are "I believe that preventing procrastination is one of the most critical components of success" (EA1). The EI measurement instrument, consisting of three items, was adjusted to incorporate the desire, interest, and belief indicators mentioned by Liñán and Chen [42] and subsequently modified by Adha et al. [4]. An illustration of an item from the EI scale is "in the not-too-distant future, I'm interested in launching

my own business" (EI2). The four-item ECC scale was derived from indicators by Yin and Jamaludin [43], namely exploration, crystallization, selection and clarification. An example of an item on the ECC scale is "my career choice will be determined by my interest in a particular occupation" (ECC3). The use of brief assessment scales with three to four items per construct was theoretically and empirically justified because they were taken from well-established entrepreneurial and educational psychology instruments. Short, theoretically grounded scales are used in SEM to improve response accuracy, reduce participant fatigue, preserve model parsimony, and ensure construct coverage [44].

Data was gathered from respondents between August and October of 2024 using an online survey that was disseminated through the official school communication channels. Participants were invited to engage voluntarily, without any obligation or coercion, and all personal identities were maintained in strict confidentiality to ensure research integrity and adhere to ethical standards. To address potential non-response bias typically linked to online surveys, various measures were adopted, including multiple reminders from teachers and school administrators to promote participation and ensure proportional representation across regions. The voluntary and anonymous nature of participation minimized social desirability bias, and the balanced response rates from the chosen sampling areas demonstrated that the collected data were sufficiently representative of the target population. The instrument involved a five-point scale that was assessed for reliability and validity. Using Cronbach's alpha and Aiken's V, the validity and reliability of the instrument used in this study were evaluated. Cronbach's alpha was utilized to evaluate the instrument's reliable performance. A rating of 0.70 or above on the Cronbach's alpha values is considered to be satisfactory [45]. Additionally, Aiken's V should have a threshold value of 0.80 or above when there are five raters [46]. To elaborate further, the following describes the range of Cronbach's alpha and Aiken's V coefficient values for each construct: PS: 0.833-0.942 (α: 0.891), SE: 0.818-0.895 (α: 0.838), EA: 0.831-0.906 (α: .914), EI: 0.806-0.883 (α: 0.814), and ECC: 0.823-0.937 (α: 0.926).

3.3. Statistical Analysis

This study uses AMOS version 24 to perform Structural Equation Modeling (SEM) statistical analysis. SEM can analyze complex interactions between observable and latent variables simultaneously, making it ideal for path analysis to evaluate theoretical models [47]. Three phases comprise the analytical process. The initial phase is on assessing the normality of the data and detecting any outliers that may skew the results. Maintaining normalcy and eliminating outliers is crucial to satisfy the assumptions necessary for SEM. The subsequent phase entailed doing Confirmatory Factor Analysis (CFA) to assess the measurement model. Convergent validity was confirmed as all standardized factor loadings surpassed 0.50, the Average Variance Extracted (AVE) values exceeded 0.50, and the Composite Reliability (CR) values were greater than 0.70. Discriminant validity was established as the square roots of the AVE values for each construct exceeded their inter-construct correlations. Furthermore, model fit indices—such as p value, CFI, RMSEA, SRMR, AGFI, GFI, and TLI—demonstrated that the measurement model attained an adequate fit. The third stage tests the structural model and hypotheses. Path analysis reveals the strength and direction of direct and indirect influences between variables [48].

4. Results and Discussion

4.1. Normality and Outlier Test

The assumption test involves evaluating normality and detecting outliers to ensure the validity of the SEM analysis. Prior to performing a detailed SEM model analysis, a thorough assessment of these assumptions is essential. The results of the normality test indicate that the critical ratio (c.r.) values for both skewness and kurtosis across all indicators are below the threshold of $\pm$2.58. Additionally, the c.r. value for the multivariate kurtosis is recorded at 2.375. Based on the guidelines provided by Byrne [48], these findings confirm that the data does not exhibit normality issues at either the univariate or multivariate levels, ensuring its suitability for further SEM analysis. An outlier test was performed in compliance with Collier [39] guideline that a multivariate outlier problem was not present if the value of mahalanobis distance (MD) was less than chi square. In accordance with the investigation's results, the highest MD value was 103.481, and the chi-square value was 181.53.

4.2. Assessment of Measurement Model

Convergent validity was examined through CFA, which serves as the first essential step in validating the measurement model. This process ensures that each construct accurately reflects the indicators used to measure it. Following the

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guidelines established by Whittaker and Schumacker [47], three primary criteria must be met to establish acceptable convergent validity. First, each indicator must demonstrate a standardized factor loading greater than 0.50, indicating a sufficient correlation between the observed variable and its underlying construct. Second, each construct's AVE should be more than 0.50, indicating that the construct explains over half of the variation in its indicators. Third, to guarantee strong internal consistency and dependability of the construct, the Composite Reliability (CR) should be more than 0.70. Table 2 demonstrates that all constructs satisfied the specified criteria, exhibiting factor loadings from 0.652 to 0.927, AVE values between 0.607 and 0.684, and CR values ranging from 0.827 to 0.885. The findings indicate a robust association between all indicators and their corresponding constructs, with the measurement model exhibiting satisfactory convergent validity.

Table 2. Examination of Convergent Validity

Factor	Item Code	Loading	AVE	CR
Parenting Styles (PS)	PS1	0.670	0.607	0.860
	PS2	0.818		
	PS3	0.843		
	PS4	0.773		
Self-Efficacy (SE)	SE1	0.927	0.625	0.831
	SE2	0.722		
	SE3	0.704		
Entrepreneurship Attitudes (EA)	EA1	0.806	0.619	0.827
	EA2	0.652		
	EA3	0.884		
Entrepreneurship Intention (EI)	EI1	0.841	0.684	0.866
	EI2	0.893		
	EI3	0.739		
Entrepreneurship Career Choice (ECC)	ECC1	0.801	0.659	0.885
	ECC2	0.863		
	ECC3	0.708		
	ECC4	0.864		

The evaluation of the measurement model advances to the next stage, which entails assessing discriminant validity. The results of the analysis of discriminant validity are presented in table 3. Based on the criteria set forth by Fornell and Larcker [49], it can be concluded that discriminant validity is satisfactory. The square root of the AVE for each construct surpasses the correlation values among constructs, thereby affirming the empirical distinctiveness of each construct. Table 3 illustrates that the diagonal AVE square roots, which range from 0.779 to 0.825, exceed the inter-construct correlations, with the highest correlation being 0.441 between self-efficacy and entrepreneurial attitudes.

Table 3. Examination of Discriminant Validity

Construct	1	2	3	4	5
1. Parenting Styles (PS)	**0.779**				
2. Self-Efficacy (SE)	0.274	**0.791**			
3. Entrepreneurship Attitudes (EA)	0.186	0.441	**0.787**		
4. Entrepreneurship Intention (EI)	0.435	0.157	0.096	**0.825**	
5. Entrepreneurship Career Choice (ECC)	0.172	0.205	0.379	0.108	**0.812**

This suggests that each latent variable represents a distinct conceptual dimension, thereby affirming the discriminant validity of the measurement model. Additionally, cross-loadings and Modification Indices (MI) were evaluated to verify the robustness of the measurement model during the CFA procedure. No significant cross-loadings were observed, suggesting that each indicator exhibited a strong association with its designated construct, with minimal overlap with other constructs. Modification indices were also examined to identify possible enhancements to the model; however, no significant re-specifications were necessary, thereby affirming that the initial model offered an adequate fit to the data. Moreover, an investigation into the model fit index was performed. According to the recommendations made by Collier [39] and Whittaker and Schumacker [47], all index values, including the p value, CFI, RMSEA, SRMR, AGFI, GFI, and TLI, were satisfactory. As presented in table 4, the model achieved a good overall fit, with $p = 0.058$, RMSEA = 0.067, SRMR = 0.056, AGFI = 0.921, GFI = 0.933, CFI = 0.966, and TLI = 0.959—all within acceptable thresholds for SEM. A satisfactory model fit is suggested by a non-significant chi-square value ($p > 0.05$)

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in SEM, which shows that the estimated covariance structure does not significantly deviate from the observed data. This study's consistently favorable RMSEA, CFI, TLI, GFI, and SRMR values further validate that the suggested model offers an acceptable and theoretically robust description of the observed data.

Table 4. Evaluation of Model Fit Indices

No.	Good of Fit Indices	Cut-Off Value	Result	Information
1.	p	≥ 0.050	0.058	Fit
2.	RMSEA	≤ 0.080	0.067	Fit
3.	SRMR	≤ 0.080	0.056	Fit
4.	AGFI	≥ 0.900	0.921	Fit
5.	GFI	≥ 0.900	0.933	Fit
6.	CFI	≥ 0.950	0.966	Fit
7.	TLI	≥ 0.950	0.959	Fit

4.3. Assessment of Structural Model

A structural model analysis and interpretation were carried out in order to study the supposed relationship between the research elements. This was done so that the suggested relationship could be investigated. In order to guarantee that the hypothesis could be validated, this was carried out. The results of the SEM testing that was done with the support of the Amos 24 program are exhibited together with their respective findings in figure 2. Table 5, which also provides a description of the influence that the coefficients have on the correlations between the research variables, contains the findings of the testing of the research hypothesis.

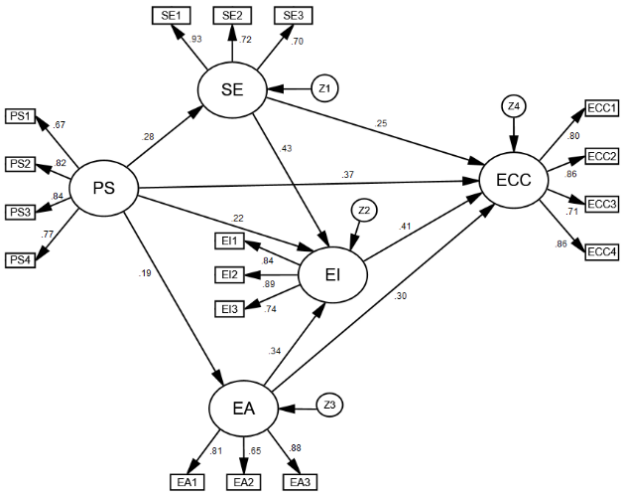

Figure 1. SEM Results

Table 5. Testing Hypothesis and Effect Size

Hypothesis	β	p	Cut of Value	Decision
PS → ECC	0.374	0.000	0.05	H1 Received
PS → EI → ECC	0.091	0.000	0.05	H2 Received
PS → SE → ECC	0.071	0.000	0.05	H3 Received
PS → SE → EI → ECC	0.050	0.004	0.05	H4 Received
PS → EA → ECC	0.058	0.002	0.05	H5 Received
PS → EA →EI → ECC	0.027	0.012	0.05	H6 Received

* Total indirect effect PS → ECC, β= 0.297
* Total effect of PS → ECC β= 0.671

The Sobel test is used to examine how parenting styles affect vocational high school students' choice of entrepreneurship career and how mediator variables self-efficacy, entrepreneurship attitudes, and entrepreneurship intention affect this relationship [50]. The results of the SEM analysis (see table 5) indicate that parenting styles have both direct and indirect effects on students' entrepreneurial career choices. The direct path from parenting styles to entrepreneurial career choice (PS → ECC) produced a coefficient of $\beta = 0.374$ ($p < 0.001$), suggesting that supportive and authoritative parenting styles play a substantial role in shaping vocational students' decisions to pursue

entrepreneurship. This finding implies that when students experience parenting that balance's structure and autonomy, they are more likely to view entrepreneurship as a viable career pathway.

The indirect paths provide further insight into the psychological mechanisms underlying this relationship. For example, the path through entrepreneurial intention (PS → EI → ECC) yielded $\beta = 0.091$ ($p < 0.001$), demonstrating that positive parenting encourages entrepreneurial intention, which in turn strengthens career choice. Similarly, self-efficacy mediated the relationship (PS → SE → ECC, $\beta = 0.071$, $p < 0.001$), highlighting the importance of confidence in one's entrepreneurial abilities as a critical link between parenting and career outcomes. Entrepreneurial attitudes also emerged as a significant mediator (PS → EA → ECC, $\beta = 0.058$, $p = 0.002$), confirming that positive orientations toward entrepreneurship translate into concrete career preferences. When these mediators were combined (PS → SE → EI → ECC, $\beta = 0.050$, $p = 0.004$; PS → EA → EI → ECC, $\beta = 0.027$, $p = 0.012$), the effects, though smaller, remained statistically significant, indicating that multi-step psychological pathways also contribute meaningfully to vocational students' entrepreneurial career choices. Despite the seemingly small magnitude of certain indirect coefficients, such as PS → EA → EI → ECC ($\beta = 0.027$), they hold theoretical and practical significance in the realm of entrepreneurial development. According to Hayes [51], in behavioral research, small but statistically significant mediating effects frequently reflect accumulating impacts that eventually make a large contribution. Collectively, the total indirect effect of PS on ECC was $\beta = 0.297$, and when combined with the direct effect, the total effect was $\beta = 0.671$. This demonstrates that parenting styles exert both a strong direct influence and a considerable indirect influence through self-efficacy, entrepreneurial attitudes, and entrepreneurial intentions.

4.4. Discussion

Students must be able to set goals and choose the right career according to the demands of the times [4]. Individuals who want to start their own entrepreneurial ventures are an invaluable resource, especially in developing countries like Indonesia. Efforts to encourage professional entrepreneurial careers in the current economic climate, where graduates have difficulty finding decent jobs, educational institutions around the world have adopted entrepreneurship [3]. Recently, in many countries, promoting entrepreneurship through various educational programs in schools has developed into a national strategic approach [52], but schools cannot alone in promoting entrepreneurship to students. Understanding the influence of parental parenting styles on students' entrepreneurial intentions is crucial [37], which culminates in students' entrepreneurial career choices. Several recent studies have stated that students' career decisions in the industrial era 4.0 are affected by parenting styles and students' entrepreneurial intentions [28], [38], where students' self-efficacy and attitudes towards entrepreneurship can also influence it [15].

The findings of this study confirm that authoritative parenting has a significant influence on students' entrepreneurial career choices, both directly and indirectly through self-efficacy, entrepreneurial attitudes, and entrepreneurial intentions. These results reinforce the notion that parenting style is a crucial determinant in shaping career-related outcomes, particularly in contexts where young people are expected to make independent choices about their futures [53]. Entrepreneurial intentions are not simply inherited but must be developed throughout one's life. One factor is how a person is raised during childhood [8]. Specifically, authoritative parenting is beneficial for developing children's interest in entrepreneurship [28]. By enjoying intimate relationships with their parents, individuals can also engage in meaningful discussions about appropriate choices for future careers [43]. These discussions can also enhance children's perspectives on the advantages and disadvantages of certain career choices [17].

Jianchao et al. [54] explain that career maturity is influenced by parental involvement, which is described as how prepared an adolescent is to make career decisions. While career maturity and career exploration are not necessarily synonymous, career exploration is crucial in the process of deciding which career path to pursue. Pinquart and Gerke [26] explained that parenting style is necessary for self-efficacy. The results also support the hypothesis that parenting style is necessary for career choice, with self-efficacy as a path variable. Several researchers have explained that the relationship between parenting style and students' entrepreneurial career choices is influenced by mediating factors such as self-efficacy and entrepreneurial intentions [29]. Parenting style, especially supportive and responsive, provides a safe emotional environment where individuals feel valued and encouraged. High self-efficacy will increase entrepreneurial interest, because individuals feel more competent in starting and supervising business ventures.

Studies show that parenting style is proven to be effective in increasing students' self-efficacy and entrepreneurial intentions [28], thereby increasing students' entrepreneurial career choices [54], Students possessing elevated self-efficacy are more adept at making career choices that align with their inherent strengths. This is a result of self-efficacy fostering self-confidence in students, which in turn allows them to make the appropriate choice when selecting a career path. Students' sense of self-efficacy in determining their future trajectories is a primary factor in readiness [29]. Students possessing elevated self-efficacy are capable to make choices and choose career choices correctly [16]. Those students who are enrolled in vocational high schools need to not only enhance their academic talents and skills but also boost their self-confidence to make the best decisions regarding their future careers. Research by Schmitt-Rodermund [7] investigated the relationship between adolescent personality, interests, parenting styles, and entrepreneurship. More recent research reinforces these findings, highlighting that supportive parenting fosters creativity, opportunity recognition, and entrepreneurial self-efficacy among adolescents in diverse cultural contexts [23], [55]. The research revealed that the development of children's entrepreneurial personalities and interests is influenced by authoritative parenting practices. Research on how parenting style effects a child's career development shows that authoritative parents encourage children to look into a wider range of prospective job options and cultivate a greater sense of autonomy in making career decisions [21].

More specifically, a parenting style that is warm and supportive, provides attitudes that empower and challenge individuals to pursue promising possibilities and can aid in the development of abilities that strengthen entrepreneurial intentions and behaviors [14]. While many individuals possess an abstract intention to pursue entrepreneurship or exhibit entrepreneurial behavior, several reasons, such as lack of knowledge on what to do, lack of role models, and inherent risk, typically prevent the majority of them from putting this desire into action [11]. The family environment can often compensate for reasons not to engage in entrepreneurial behavior through support, advice, and other means [24]. Consequently, it is essential to emphasize the role that familial factors like a strong sense of attachment, authoritative parenting, and protective factors can play in determining whether or not an individual possesses the intention to establish their own venture. Choosing a different line of work frequently necessitates deliberate action planning, which is beneficial to the success of entrepreneurs and their companies [23]. A person's attitude towards an activity triggers their intentions to engage in it, thus it's crucial to keep in mind that family dynamics might influence the nurture of entrepreneurial aspirations. Additionally, it's worth noting that entrepreneurial aspirations nearly always lead to professional decisions [29].

While the results highlight the importance of authoritative parenting, these findings should be interpreted within Indonesia’s collectivist sociocultural context. In cultures characterized by close family ties and respect for authority, aspects of authoritarian parenting—such as structured guidance, discipline, and hierarchical relationships—may also have positive implications for entrepreneurial development [56]. Indonesian parents often combine warmth and control, forming a hybrid approach that encourages both obedience and initiative. Such cultural nuances suggest that parenting in collectivist societies may foster entrepreneurship differently from Western settings, where autonomy and independence are more strongly emphasized [57]. Although most findings aligned with theoretical expectations, several indirect pathways—particularly those mediated by entrepreneurial attitudes and intentions—showed relatively small effect sizes. This indicates that the influence of parenting on entrepreneurial career choices may not be uniform, as contextual realities such as limited entrepreneurial exposure, social risk aversion, and economic uncertainty can moderate the strength of these relationships. Interpreting the results through this cultural and contextual lens enriches the discussion by showing that even within supportive family environments, broader sociocultural structures may constrain the translation of entrepreneurial attitudes into actual career choices. Future research should therefore further examine how collectivist values and contextual barriers jointly shape the development of entrepreneurial intentions and behaviors among Indonesian youth. Future studies should therefore further examine how collectivist values and varying degrees of parental control shape entrepreneurial attitudes and behaviors among Indonesian youth.

5. Conclusion

This study demonstrates that parenting styles, particularly authoritative parenting, significantly influence students’ entrepreneurial intentions and career choices, with self-efficacy and entrepreneurial attitudes serving as critical mediating variables. These findings extend the *Theory of Planned Behavior* (TPB) by emphasizing the role of parenting

as an antecedent to attitudes and perceived behavioral control, thereby offering a contextualized understanding of how family dynamics shape entrepreneurial career aspirations among vocational students. In doing so, the study contributes to the broader entrepreneurship education literature by integrating family-based socialization processes into models of entrepreneurial intention. Nevertheless, this study is not without limitations. The reliance on self-reported data from students may introduce social desirability and perceptual bias, as students' descriptions of their parents' styles may not fully capture the parents' actual behaviors or intentions. The focus on an urban student population also restricts the generalizability of the findings, as rural contexts may present different family structures, cultural norms, and entrepreneurial opportunities. Furthermore, the absence of parental perspectives limits the triangulation of data, which could have strengthened the validity of the findings.

Future research may mitigate these limitations by employing multi-informant designs that gather data from both students and parents, thereby capturing reciprocal perceptions of parenting behaviors. Longitudinal or mixed-method approaches may be employed to monitor changes in entrepreneurial intention and career choices over time, offering deeper insights into the dynamic development of parenting influences. These designs would enhance data triangulation and validity while enriching the theoretical understanding of intergenerational processes in entrepreneurship education. Notwithstanding these limitations, the study presents several implications. This study enhances and expands the TPB by illustrating the impact of parenting practices on the antecedents of entrepreneurial intention, thereby offering a framework for future research on the influence of family roles in entrepreneurial career development. From a practical perspective, schools and policymakers can play a more strategic role by organizing parental engagement programs—such as workshops or parenting seminars—that integrate entrepreneurship values and communication skills aligned with vocational education goals. Schools could also embed parent–school collaboration mechanisms through career counseling activities or family-based entrepreneurship projects that encourage joint participation of parents and students. At the policy level, education authorities may develop guidelines or modules on entrepreneurship-oriented parenting to strengthen family involvement in vocational students' career planning and entrepreneurship readiness.

6. Declarations

6.1. Author Contributions

Conceptualization: M.A.A., N.S.A., and R.A.; Methodology: M.A.A., N.S.A., and F.S.A.; Software: F.S.A., and M.R.; Validation: N.F., and R.A.; Formal Analysis: N.S.A., F.S.A., and M.R.; Investigation: M.A.A., F.S.A., and M.R.; Resources: M.A.A., and M.R.; Data Curation: F.S.A., and M.R.; Writing Original Draft Preparation: M.A.A., and N.S.A.; Writing Review and Editing: M.A.A., N.F., and R.A.; Visualization: F.S.A., and M.R. All authors have read and agreed to the published version of the manuscript.

6.2. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

6.3. Funding

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6.4. Institutional Review Board Statement

Not applicable.

6.5. Informed Consent Statement

Institutional approval was obtained from the participating schools, and student participation was voluntary and anonymous. As the participants were minors under school supervision, informed consent was granted through school administrators acting as institutional guardians.

6.6. Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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