



Partnerships for Entrepreneurial Success: A Validation Study of the School-Family-Community Partnership Scale in Vocational Education

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ABSTRACT

This study intends to validate the School-Family-Community Partnership (SFCP) Scale in advancing entrepreneurial paths among Indonesian vocational graduates. The SFCP model emphasizes the collaborative efforts of schools, families, and communities in fostering entrepreneurship among students. Given the unique socio-cultural context of Indonesia, this research addresses the need for a validated scale to measure the effectiveness of these partnerships in vocational education settings. 360 students from Indonesian vocational high schools participated in this study. Three main dimensions—Educational Support (ES), Family Support (FS), and Community Support (CS)—were found by means of exploratory factor analysis (EFA) and confirmatory factor analysis (CFA). The findings indicate that these dimensions significantly contribute to students' entrepreneurial aspirations, with Educational Support emerging as the most influential factor. The scale exhibited strong reliability and validity, establishing it as a reliable instrument for future research in entrepreneurship education. Emphasizing the need of combining educational, familial, and community assistance in developing entrepreneurial careers among vocational students, this study offers important insights for teachers, policymakers, and community leaders.

Keywords: Community Support, Entrepreneurial Careers, Entrepreneurial Education, Family Support, Vocational Education

JFL Classifications: L26, I25, C38

1. INTRODUCTION

The dynamic and fast changing global market calls for young people to develop entrepreneurial skills so they may be ready for the demands of the workforce of tomorrow. Vocational education is increasingly important in many nations, including Indonesia, in helping students be ready for straight into the employment. Indonesian vocational high schools are especially meant to give pupils useful knowledge and skills catered to many sectors, including entrepreneurship, together with practical abilities (Tentama and Yusantri, 2020; Timan et al., 2024). The promotion of entrepreneurial careers among vocational students

is seen as a strategic approach to foster economic growth, reduce unemployment, and create a generation of job creators rather than job seekers (Costa et al., 2016; Jansen et al., 2015).

Entrepreneurship education in vocational schools is not limited to the classroom but extends to practical training and real-world experiences (Abdullah et al., 2019; Morselli and Ajello, 2016). However, the success of such programs depends heavily on the involvement of key stakeholders beyond the school itself. The concept of the triadic model of education, often referred to as the School-Family-Community partnership (SFCP), is crucial in this context (Adha et al., 2023; Denanyoh et al., 2015; Timan

et al., 2024). This model emphasizes the collaborative efforts of schools, families, and communities in nurturing and promoting entrepreneurial mindsets and careers among students. The integration of these three entities can create a supportive ecosystem that enhances students' learning experiences and better prepares them for entrepreneurial endeavors.

Not limited to the classroom, entrepreneurship education in vocational institutions includes practical training and real-world experiences (Abdullah et al., 2019; Morselli and Ajello, 2016). Still, the success of such initiatives mostly rests on the participation of important players outside of the institution. Crucially in this context is the idea of the triadic model of education, sometimes known as the School-Family-Community Partnership (SFCP) (Adha et al., 2023; Denanyoh et al., 2015; Timan et al., 2024). This approach stresses the joint efforts of families, businesses, and educational institutions in fostering among their pupils entrepreneurial ideas and professions. These three groups working together can build a supporting ecosystem that improves students' educational experiences and gets them ready for entrepreneurship.

Although the SFCP is clearly important, knowledge of how these interactions particularly affect the encouragement of entrepreneurial careers among vocational students still lags greatly. With little regard paid to the SFCP in encouraging entrepreneurship, existing studies have mostly concentrated on general educational outcomes (Denanyoh et al., 2015; Wach et al., 2020). Moreover, the instruments and scales applied to assess the influence of these alliances on the development of entrepreneurship careers are sometimes not validated for particular situations, such those of Indonesian vocational colleges. Research on the function of the School-Family-Community relationship in educational results has been extensive in many different settings. Emphasizing six kinds of involvement—parenting, decision-making, volunteering, communicating, learning at home, and community collaboration—Epstein (2011) framework on family, school, and community partnerships is among the most powerful models in this sector. Building on this approach, later studies have looked at how these factors affect general school effectiveness, behavioral results, and student success.

Regarding entrepreneurship education, the terrain of research is more scattered, nevertheless. Research on entrepreneurship education has shown that it improves students' job decisions and entrepreneurial aspirations (Fayolle and Gailly, 2015; Liñán and Fayolle, 2015; Nabi et al., 2017). Most of these studies, however, concentrate on either general or higher education environments; vocational education and the particular function of the SFCP receive rather less attention. Within the framework of vocational education, family support and community involvement—along with school-based learning—are increasingly seen as part of a comprehensive approach to entrepreneurship education (Bagheri and Pihie, 2010; Plessis, 2016). However, there is a dearth of empirical studies especially verifying the tools used to evaluate the success of such alliances in advancing entrepreneurial careers. Though important, the few studies that do exist usually rely on qualitative data or case studies, which do not offer the strong quantitative evidence required to extend results across several contexts.

This study intends to verify a scale meant to assess the influence of the School-Family-Community (SFC) cooperation in fostering entrepreneurial careers among Indonesian vocational students, therefore bridging a major gap in region-specific research. The study highlights the importance of considering Indonesia's unique cultural, social, and economic context, which influences education differently across regions. By focusing on vocational education, this research underscores the need for tailored educational strategies that cater to the distinct career aspirations and challenges of vocational students. The validated scale offers a reliable tool for future assessments of entrepreneurship education programs, contributing valuable insights to the broader field of educational sciences. Moreover, the findings provide practical guidance for educators, policymakers, and community leaders in Indonesia and similar contexts, enhancing the effectiveness of entrepreneurship education in developing countries.

2. LITERATURE REVIEW

By means of a cooperative environment that supports children's whole development, school-family-community partnerships (SFCP) significantly improve educational outcomes (Anderson and Gaddefors, 2016; Kirkley, 2017; Soleimanof et al., 2021). Epstein's model of overlapping spheres of influence emphasizes how closely these three main environments—school, home, and community—are linked and how together they affect student performance and personal development (Epstein, 2011). Particularly in environments like vocational education where the emphasis is on pragmatic, profession-oriented training, the integration of various realms is vital in supporting not only academic achievement but also social and career growth (Astiana et al., 2022; Hunter and Lean, 2018; Shen et al., 2017).

SFCP are essential in helping students in vocational education be ready for the workforce. Successful job growth depends on academic knowledge, practical skills, and moral direction—all of which these alliances provide students in a complete support structure (Alkahrer and Gan, 2020; Bryan et al., 2020). The involvement of families and communities is particularly important in encouraging entrepreneurial careers, as it provides a broader perspective and real-world experiences that traditional classroom settings may not offer. Entrepreneurship education has emerged as a key component of vocational training, especially in developing countries like Indonesia where youth unemployment is a pressing issue. As part of its approach to provide students the tools required to launch their own companies and propel economic development, the Indonesian government has given entrepreneurship education in vocational schools top priority (Narmaditya et al., 2024; Timan et al., 2024).

Entrepreneurship education has been found to have a major effect on students' entrepreneurial intentions and confidence in launching a company (Adha et al., 2022; Hou et al., 2019; Nowiński and Haddoud, 2019). For example, Fayolle and Gailly (2015) revealed that students who took part in entrepreneurship education initiatives had greater degrees of entrepreneurial self-efficacy and considered entrepreneurship as a feasible career choice more often. Nonetheless, external elements like family support and community involvement—which are absolutely vital in determining students's

entrepreneurial attitudes and motivations—often determine the efficacy of these programs (Ahmed et al., 2021; Denanyoh et al., 2015; Varady et al., 2015).

In the framework of vocational education, SFCP can improve the effect of entrepreneurship education by giving students a conducive environment that motivates risk-taking and creativity (Anderson and Gaddefors, 2016; DePetrus and Eames, 2017; Wongnaa and Seyram, 2014). Family members can offer encouragement and financial support, while community members, including local business owners, can provide mentorship and practical business insights (Aldrich et al., 2021; Shanine et al., 2022). The collaborative approach assures that students not only gain the required business talents but also grow the confidence and networks required to succeed in the entrepreneurial environment.

The promotion of entrepreneurial careers through SFCP is particularly relevant in Indonesia due to the country's unique cultural and socio-economic context. In Indonesian society, the family plays a central role in decision-making processes, and community ties are often strong, with a collective approach to supporting individual success (Adha et al., 2023; Suratno et al., 2021). This cultural background makes the SFC partnership model especially effective in promoting entrepreneurship among vocational students. The family, often the primary source of emotional and financial support, can significantly influence students' career choices (Aggarwal and Shrivastava, 2021; Bruton and Chen, 2022). In many cases, students may be hesitant to pursue entrepreneurship due to perceived risks and uncertainties. However, when families actively participate in the educational process and understand the potential benefits of entrepreneurship, they are more likely to encourage and support their children's entrepreneurial ambitions. Similarly, the community can play a crucial role by providing real-world opportunities for students to apply their entrepreneurial skills (Shkabatur et al., 2022; Wach et al., 2020). This could include internships, apprenticeships, or collaborations with local businesses. Community involvement not only helps students gain practical experience but also fosters a sense of belonging and responsibility towards contributing to local economic development (Gurău and Dana, 2018; Kimmitt et al., 2020).

3. METHODS

3.1. Research Design

Using a quantitative research methodology, this study particularly focuses on the validation of a scale measuring the influence of the School-Family-Community Partnership (SFCP) in fostering entrepreneurial careers among Vocational High School students in Indonesia. The validity and dependability of the scale are investigated in this work using both Confirmatory Factor Analysis (CFA) and Exploratory Factor Analysis (EFA). The method is meant to find fundamental causes and verify the scale's structure using empirical data.

3.2. Research Participants

Students from Vocational High Schools spread around the Malang area of Indonesia make up the population of this study. The sample

was selected using purposive random sampling, focusing on students who have already participated in both entrepreneurship education and practical entrepreneurship activities within their school curriculum. This approach ensures that the participants have the relevant experience and exposure necessary to provide meaningful responses regarding the role of School-Family-Community Partnerships in their entrepreneurial career aspirations. Based on the recommendations by Tabachnick and Fidell (2018), which suggest a minimum sample size of 300 to conduct factor analysis and avoid bias, the study initially distributed 500 questionnaires. Out of these, 360 complete and usable responses were received, exceeding the minimum requirement and ensuring robust data for factor analysis. The purpose and procedures of the study were thoroughly disclosed to participants prior to their participation to guarantee research ethics compliance. Voluntary informed assent was obtained with guarantees of anonymity and confidentiality for subjects' responses. Students were permitted to withdraw at any time without incurring any repercussions, and participation was entirely voluntary. The data that was collected were exclusively utilized for academic objectives.

3.3. Research Instruments

The primary research instrument was a questionnaire developed based on previous scales used to measure the role of the School-Family-Community Partnership in promoting entrepreneurial careers. Key references for scale development included studies by Aliabadi et al. (2022); Denanyoh et al. (2015); Eesley and Wang (2017); Farrukh et al. (2017); Hockerts (2018); Utari and Sukidjo (2020). The questionnaire consisted of 39 items, each operationalizing different aspects of the School-Family-Community Partnership's role in fostering entrepreneurship among students. The questionnaire employed a four-point Likert scale, with responses extending from "Strongly Disagree" to "Strongly Agree." To enhance the participants' comprehension, the questionnaire was translated into Indonesian language. The translation process ensured that the items retained their original meaning while being culturally relevant and understandable for the respondents.

3.4. Statistical Analysis

Two key phases of data analysis were followed: first, the underlying factor structure of the scale was found using exploratory factor analysis (EFA). This method enabled the investigation of the possible scope of the School-Family-Community Partnership function in supporting entrepreneurial paths. Principal Component Analysis (PCA) with Varimax rotation was used to remove factors from the analysis keeping those with eigenvalues higher than one. Cronbach's alpha helped to assess each found factor's internal consistency. Confirmatory Factor Analysis (CFA) was used to verify the model fit of the found factors following EFA identification of the factor structure. CFA evaluated the scale's construct validity with regard to convergent and discriminant validity. Fit of the model was assessed using goodness-of-fit indices including CMIN/df, p-value, CFI, AGFI, GFI, SRMR, RMSEA, and TLI. A good match is shown by the CMIN/df ratio below 3; a P-value higher than 0.05 guarantees no appreciable change between the model and the data. Strongly comparable fit is shown by both CFI and TLI values above 0.90. Also over 0.90, the

AGFI and GFI help to confirm the fit of the paradigm. An SRMS <0.08 and an RMSEA <0.08 point to little inaccuracy and a near fit to the actual data. These indices taken together verify that the model fits the data utilized in this investigation rather well.

4. RESULTS

4.1. Exploratory Factor Analysis

This research utilized Exploratory Factor Analysis (EFA) via SPSS version 24 to ascertain the fundamental factor structure of the proposed scale. Through VARIMAX rotation, the analysis revealed three distinct latent variables: Educational Support (ES), Family Support (FS), and Community Support (CS). The selection of items within each factor was refined using corrected item-total correlation coefficients (r) to eliminate irrelevant or weak indicators that could potentially distort the factor solution. According to the guidelines provided by Hair et al. (2016), all retained items exhibited correlation values exceeding the threshold of 0.40, as documented in Table 1.

Internal consistency for each factor was assessed using Cronbach's alpha, with all coefficients meeting or surpassing the recommended minimum of 0.70 (Whittaker and Schumacker, 2022), indicating satisfactory reliability. Moreover, the normality assumption for item distribution was validated by ensuring that Skewness and Kurtosis values fell within the acceptable range of -2 to $+2$, in line with criteria established by Cain et al. (2017). Kaiser-Meyer-Olkin (KMO) and Bartlett's Test of Sphericity were performed to assess the sample's suitability for factor analysis. The KMO value exceeded 0.60, confirming sample suitability (Siddoo et al., 2019; Tabachnick and Fidell, 2018), while the significant result ($P < 0.05$) from Bartlett's Test further affirmed the feasibility of applying EFA to the dataset.

Given that data collection relied on self-reported responses, additional analyses were undertaken to assess potential common method bias (CMB). An initial rotated factor analysis was performed in SPSS, wherein all items were loaded simultaneously to determine whether a single dominant factor emerged. The results showed the presence of three independent factors with eigenvalues >1.0 , collectively explaining 67.35% of the total variance, with the largest factor accounting for only 32.48%. As this value is well below the 50% threshold, it indicates that common method bias did not pose a significant issue in this study (Podsakoff et al., 2023).

4.2. Confirmatory Factor Analysis

Confirmatory Factor Analysis (CFA) is a technique that is described by Hair et al. (2016) as a way for determining the degree to which variables accurately represent a notion. According to Byrne (2016); Whittaker and Schumacker (2022), Confirmatory Factor Analysis (CFA) compares the factor structure of a proposed

or hypothesized model with empirical data in order to determine whether or not it is consistent with the model. It is essential to juxtapose the factor structure of the proposed or theoretical model with the empirical data to achieve this objective. Furthermore, CFA can be employed to formulate assessment inquiries that are grounded in pertinent theoretical frameworks (Hair et al., 2016; Zhao et al., 2015). A thorough analysis of the loading factors and the observed variables was conducted subsequent to the construction of the model (Thien et al., 2014). This assessment was carried out to validate the model. Structural equation modeling (SEM) is utilized in this investigation since it makes it easier for researchers to develop intricate relationship models. Moreover, to substantiate the model introduced in this study, structural equation modeling (SEM) was utilized. This method is pertinent to earlier studies, as discussed by Burhanuddin (2019); Özcan et al. (2020). Since its application was limited to that particular setting, the model was utilized completely for the purpose of representing a hierarchical factor construct model. Through the use of a three-factor hierarchical model, the Second-order Factor is an important quality construct that is utilized by the School-Family-Community Partnership (SFCP) in the process of fostering entrepreneurial vocations among vocational students. A representation of the factor is this model. The results of the CFA, which were obtained from individual replies, provided evidence that the structure that was hypothesized was correct.

First, to see if the model is appropriate for the data being examined, the examination of the factor loading for each observable variable corresponding to each latent variable is conducted. For the purpose of evaluating the connection between the variables that are seen (x) and the latent components (ξ), the loading (λ) procedure is employed. Hair et al. (2016) suggest that the factor loading score of every item corresponds with the contribution it provides to define the matrix factors. This correlation is positive. In order to facilitate entrepreneurial careers among vocational students, the purpose of this project is to construct a complete quality model for School-Family-Community Partnership (SFCP). There are three sub-dimensions that make up the model. These sub-dimensions include the roles of Educational Support (ES), Family Support (FS), and Community Support (CS (Community Support)). It can be deduced from the data shown in Table 2 and Figure 1 that the first-order factors had significant loadings on the general factor, which especially pertains to the quality of the School-Family-Community Partnership (SFCP). There is a substantial correlation between the maximum loading factor (1.00) and all of the features, including the role of educational assistance, the support of families, and the support of communities.

Following what was indicated earlier, EFA is responsible for the generation of three unique factors, which are subsequently validated by CFA. As recommendation by Hair et al. (2016), the analysis reveals that all of the components that were examined

Table 1: Results of EFA

Variable	Eigen Values	p (BTS)	KMO	Explained Variance (%)	r	α
Educational Support (ES)	6.58	0.00 (295.38)	0.84	32.48	0.51-0.76	0.86
Family Support (FS)	4.13	0.00 (348.91)	0.76	25.15	0.48-0.84	0.80
Community Support (CS)	1.66	0.00 (261.14)	0.71	9.72	0.56-0.88	0.75

Table 2: Hierarchical model, items, AVE and CR

Second-order factor	First-order factors	Indicators	Items	Loadings	AVE	CR
School-Family-Community Partnership (SFCP)	Educational Support (ES) [1.0]	ES1	Students have a good understanding of entrepreneurship subjects/or similar subjects	0.76	0.66	0.95
		ES2	Entrepreneurship/or similar subjects that students take include entrepreneurial practices	0.84		
		ES3	Students gain entrepreneurial knowledge from formal education (school)	0.89		
		ES6	The entrepreneurial skills improvement activities that students participate in motivate students to become entrepreneurs.	0.71		
		ES7	Entrepreneurship teaching materials delivered by teachers are relevant to current developments	0.9		
		ES8	Students understand well the entrepreneurship material taught by the teacher	0.78		
		ES9	Teachers motivate students to choose a career as entrepreneurs in the future	0.76		
		ES10	Teachers have experience in entrepreneurship	0.84		
		ES12	Teachers are able to share their knowledge and experience with students in developing businesses based on existing business opportunities.	0.87		
		ES13	There is an entrepreneurship laboratory in the school	0.81		
		ES15	The facilities provided by the school are adequate for use by students in entrepreneurship.	0.74		
	Family Support (FS) [1.0]	FS2	Students' families try to provide experience in entrepreneurship	0.86	0.64	0.94
		FS3	The student's family always provides an example of not giving up easily when my efforts fail	0.87		
		FS5	Family support is one of the factors that influences students in decision making.	0.70		
		FS6	Students' families are invited to discuss determining their future after graduating from school.	0.82		
		FS7	Students' families are encouraged to plan careers as entrepreneurs.	0.85		
		FS8	Students' families teach them to have an independent character after graduating from school by becoming entrepreneurs.	0.72		
		FS10	Students' families teach a sense of responsibility in managing finances, thereby supporting entrepreneurial activities.	0.73		
		FS11	My family is ready to provide financial capital for entrepreneurship	0.82		
		FS14	The family provides freedom to develop creativity and initiative in starting a business.	0.81		
	Community Support (CS) [1.0]	CS2	Students have good relations with several capital owners	0.83	0.64	0.91
		CS4	Students often get information about improving entrepreneurial skills from the community.	0.74		
		CS5	Students have a social network that they can utilize if they decide to become an entrepreneur.	0.79		
		CS6	Students become members of organizations related to entrepreneurial activities outside the school environment.	0.85		
		CS9	The community shows a positive attitude towards all forms of entrepreneurial activities.	0.76		
		CS10	The community participates in providing support for student entrepreneurial activities at school	0.81		

have loading factors that are greater than the minimum permissible value of 0.70. The finding derives from the convergent validity analysis shown in Table 2. This indicates that the items within each construct exhibit a robust correlation with the underlying component, serving as significant evidence of convergent validity. This indicates that the constructs are generally accurate. The construct demonstrates convergent validity, as the items consistently assess the same concept. This serves as the foundation for the claim that the model is acceptable.

Additionally, a Composite Reliability (CR) examination was carried out in order to ensure that the constructs that were evaluated were trustworthy. The results of the study showed that the CR

values for each construct were greater than 0.70, which is also consistent with the recommendations made by Hair et al. (2016). Not only does this illustrate that the constructs are convergently acceptable, but it also demonstrates that they are dependable, which means that they present outcomes that are consistent across all measurement occasions. The CR value for the ES, for instance, is 0.95, while the CR value for the FS is 0.94, and the CR value for the CS is 0.76; the values presented indicate a high reliability.

Additionally, for enhanced convergent validation, the average variance extracted (AVE) calculation was performed. According to Table 2, all of the constructs' AVE values were over the 0.50 cutoff, in accordance with the advice of Rönkkö and Cho (2020). A high

Figure 1: Hierarchical factor model



AVE score suggests that relevant indicators, not error, account for the majority of the variance explained by the concept. For instance, the AVE values for CS, FS, and ES are 0.64, 0.66, and 0.66, respectively, suggesting that the indicators account for over 50% of the variance in the construct. By using factor loading, CR, and AVE analysis, this study demonstrates strong convergent validity, establishing a robust basis for further exploration of the findings.

Discriminant validity represents a crucial element in evaluating the degree to which distinct constructs within a measurement model are genuinely separate from one another. As noted by Rönkkö and Cho (2020), discriminant validity serves to affirm that distinct concepts can be differentiated through their respective signs or indicators. Hair et al. (2016) posited that within any given structure, the interconnections among its components ought not to exceed the square root of the Average Variance Extracted (AVE) attributed to those components.

The investigation's findings, presented in Table 3, indicate that the square root of the Average Variance Extracted (AVE) for

Table 3: Discriminant validity

Construct	ES	FS	CS
Educational Support (ES)	0.811		
Family Support (FS)	0.262	0.800	
Community Support (CS)	0.185	0.213	0.797

each construct surpasses the corresponding correlation coefficient for that construct. The square root of AVE for the ES is 0.811, exceeding the correlations with FS (0.262) and CS (0.185). The finding illustrates that each construct is more closely linked to its respective indicators than to other constructs, suggesting that discriminant validity has been successfully established. This analysis illustrates that the constructs utilized in this investigation are clearly distinct, thereby enabling the accurate measurement of a variety of concepts within the research. The measurement model's overall validity is improved by the establishment of discriminant validity, which confirms that the results accurately represent The proposed structure outlined in this investigation.

Table 4: Fit indices

Indices	CMIN/df	p	CFI	AGFI	GFI	SRMR	RMSEA	TLI
Cut of Value	<3.00	≥0.05	>0.90	>0.90	>0.90	<0.08	<0.08	>0.90
Measured	1.68	0.07	0.94	0.91	0.92	0.05	0.06	0.93
Interpretation	Fit	Fit	Fit	Fit	Fit	Fit	Fit	Fit

Figure 1 indicates that the three basic characteristics that are contained inside the model have an effect on the overarching components that make up the School-Family-Community Partnership (SFCP) model. The model fit index presented in Table 4 demonstrates that the measurement model satisfies the criteria set forth by Browne and Cudeck (1992) and Hu and Bentler (1999), according to the findings of the study. The fit indices indicate $P = 0.07$, suggesting that the model does not significantly differ from the observational data. Additionally, the CMIN/df value of 1.68, which is less than the 3.00 benchmark, implies a good model fit. Additionally, other indices exceeding the criterion of 0.90 include a CFI of 0.92, an AGFI of 0.91, and a GFI of 0.92, showing that the model demonstrates a strong fit to the data. Since both the SRMS of 0.05 and the RMSEA of 0.06 are below the criterion of 0.08, meaning that the error produced by the model is really minor, thereby supporting the acceptability of the model. At last, the model's quite strong fit is shown by the TLI value of 0.93, which is near to 1. All of these so corroborate the validity of the measuring model.

5. DISCUSSION

This study sought to validate the School-Family-Community Partnership (SFCP) Scale in fostering entrepreneurial careers in vocational high schools. The results from both the EFA and CFA provide compelling evidence supporting the validity and reliability of the SFCP Scale, which measures three distinct dimensions: Educational Support (ES), Family Support (FS), and Community Support (CS). The factor analysis identified Educational Support (ES) as the most significant dimension, with a robust set of indicators reflecting the role of schools in facilitating entrepreneurial education. This finding aligns with previous research indicating that schools are central to entrepreneurship education, providing both the formal curriculum and the practical experiences necessary to develop entrepreneurial skills (Abdullah et al., 2019; Li and Islam, 2021; Purwana et al., 2025). The high factor loadings and internal consistency of the ES construct underscore the importance of a well-structured entrepreneurial curriculum, adequate resources, and the motivational role of educators in inspiring students to pursue entrepreneurial careers.

Vocational schools are in a unique position to enhance their entrepreneurship curricula by ensuring that it is both theoretically sound and practically oriented (Morselli and Ajello, 2016; Shu et al., 2020). Schools should provide sufficient opportunities for students to involve in hands-on entrepreneurial initiatives, such as business simulations, internships, and projects that mirror real-world entrepreneurial challenges (Foucrier and Wiek, 2019; Fuentelsaz et al., 2018; Kakouris, 2021). Furthermore, teachers play a crucial role in this process, and therefore, professional development programs focusing on entrepreneurial teaching

methods could significantly enhance the effectiveness of entrepreneurship education in vocational schools.

Family Support (FS) emerged as another critical factor influencing students' entrepreneurial aspirations. The CFA results confirmed that this dimension is reliably measured by the scale, with strong factor loadings and high composite reliability. This finding is consistent with previous studies that highlight the significant role families play in shaping students' career choices, particularly in cultures where family expectations and support are pivotal (Anjum et al., 2022; Farrukh et al., 2017; Jensen et al., 2017). Families can serve as a powerful source of motivation and support for students considering entrepreneurship as a career. This could involve not only financial support but also emotional encouragement, exposure to entrepreneurial activities within the family, and discussions about future career plans (Aggarwal and Shrivastava, 2021; Ahmed et al., 2021; Al Ayyubi et al., 2018). Given the importance of family influence, educational institutions could benefit from engaging families more actively in their children's entrepreneurial education. Programs that involve parents in school activities or provide them with resources to support their children's entrepreneurial ambitions could further enhance the effectiveness of entrepreneurship education.

Community Support (CS) was identified as the third key dimension, with the CFA confirming its distinct role in the SFCP model. This dimension captures the broader social and economic networks that students can access through their communities, which are crucial for entrepreneurial success (Buratti et al., 2022; Rauch and Hulsink, 2015; Timan et al., 2024). The results indicate that strong community support, characterized by access to networks, mentorship opportunities, and positive societal attitudes towards entrepreneurship, significantly contributes to students' entrepreneurial intentions. Community involvement should be an integral part of entrepreneurship education in vocational schools. Schools could collaborate with local businesses, industry professionals, and community organizations to create mentorship programs, provide real-world entrepreneurial experiences, and foster a supportive environment for young entrepreneurs (Buratti et al., 2022; Wach et al., 2020). These collaborations can offer students the resources and networks necessary to transition from education to entrepreneurial practice successfully.

6. CONCLUSION

This study successfully validated the School-Family-Community Partnership (SFCP) Scale, specifically designed to measure the role of educational, family, and community support in encouraging vocational high school students to pursue entrepreneurial professions. The validated scale highlights three critical dimensions: Educational Support (ES), Family Support (FS), and

Community Support (CS). The findings underscore the significance of these dimensions in fostering entrepreneurial aspirations and preparedness among vocational students. Educational Support emerged as the most influential factor, reflecting the critical role of schools in providing both the theoretical foundation and practical experiences necessary for entrepreneurship. Family Support also plays a crucial role, particularly in cultures where familial influence is strong, providing both emotional and financial backing for students. Lastly, Community Support, which includes access to networks and mentorship, was shown to be essential for students' entrepreneurial success.

Although this work offers insightful analysis, certain constraints should be recognized. First, the study concentrated on Malang Raya region vocational students, therefore restricting the generalizability of the results to other areas or educational environments. Second, the study drew on self-reported data, which can have social desirability or recall bias. The usage of extra data gathering techniques, including interviews or focus groups, notwithstanding the validation of the scales and establishment of dependability. Finally, the study concentrated on verifying the SFCP scale without investigating the causal links between the found elements and real entrepreneurial results. A number of recommendations can be made in light of the findings for educational practice and policy, and also for future researchers: (a) Vocational schools should prioritize the development of entrepreneurship curricula that are both theoretically robust and practically oriented. This could include integrating business simulations, internships, and real-world projects into the curriculum; (2) Schools should develop strategies to actively involve families in their children's entrepreneurial education. This could be achieved through workshops, informational sessions, and providing resources that enable parents to support their children's entrepreneurial aspirations effectively; (c) Schools should strengthen partnerships with local businesses, industry professionals, and community organizations, these collaborations can provide mentorship opportunities, access to networks, and practical entrepreneurial experiences for students; and (d) Future research should aim to validate the SFCP scale across different regions and educational settings to enhance its generalizability. Additionally, exploring the causal relationships between the SFCP factors and actual entrepreneurial success could provide deeper insights into how these partnerships can be optimized.

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REFERENCES

- Abdullah, Z., Hoque, K.E., Ramlan, N.H., Shafee, S. (2019), Designing the structural model of TVET lecturers' professionalism and generic skills based on an empirical study in Malaysia. *SAGE Open*, 9(3), 1-18.
- Adha, M.A., Eryanto, H., Ariyanti, N.S., Musadad, A.A., Musyaffi, A.M., Wibowo, A. (2023), Evaluating the structural effect of family support and entrepreneurship training on entrepreneurship intention among Indonesian university students. *International Journal of Educational Methodology*, 9(1), 227-236.
- Adha, M.A., Musyaffi, A.M., Ariyanti, N.S., Ansar, R., Wibawa, E.A. (2023), Authoritative parenting styles as antecedent of entrepreneurial intentions for vocational high school students. *Journal of Community Positive Practices*, 4, 95-114.
- Adha, M.A., Wibowo, A., Faslah, R., Ariyanti, N.S., Lutfia, A. (2022), Students ideal career in the 4.0 industrial. *Journal of Eastern European and Central Asian Research*, 9(4), 651-664.
- Aggarwal, A., Shrivastava, U. (2021), Entrepreneurship as a career choice: Impact of environments on high school students' intentions. *Education + Training*, 63(7/8), 1073-1091.
- Ahmed, I., Islam, T., Usman, A. (2021), Predicting entrepreneurial intentions through self-efficacy, family support, and regret. *Journal of Entrepreneurship in Emerging Economies*, 13(1), 26-38.
- Al Ayyubi, W.U., Setyanti, S.W.L.H., Suroso, I. (2018), The role of self efficacy as mediating the influence of family environment and social environment on student entrepreneur interest. *International Journal of Scientific and Technology Research*, 7(7), 33-39.
- Aldrich, H.E., Brumana, M., Campopiano, G., Minola, T. (2021), Embedded but not asleep: Entrepreneurship and family business research in the 21st century. *Journal of Family Business Strategy*, 12(1), 1-19.
- Aliabadi, V., Ataei, P., Gholamrezai, S. (2022), Identification of the relationships among the indicators of sustainable entrepreneurial ecosystems in agricultural startups. *Journal of Innovation and Knowledge*, 7(4), 1-9.
- Alkahr, I., Gan, D. (2020), The role of school partnerships in promoting education for sustainability and social capital. *The Journal of Environmental Education*, 51(6), 416-433.
- Anderson, A.R., Gaddefors, J. (2016), Entrepreneurship as a community phenomenon; reconnecting meanings and place. *International Journal of Entrepreneurship and Small Business*, 28(4), 504-518.
- Anjum, T., Amoozegar, A., Farrukh, M., Heidler, P. (2022), Entrepreneurial intentions among business students: The mediating role of attitude and the moderating role of university support. *Education and Training*, 65(4), 587-606.
- Astiana, M., Malinda, M., Nurbasari, A., Margaretha, M. (2022), Entrepreneurship education increases entrepreneurial intention among undergraduate students. *European Journal of Educational Research*, 11(2), 995-1008.
- Bagheri, A., Pihie, Z.A.L. (2010), Role of family leadership development of university students. *World Applied Science Journal*, 11(4), 434-442.
- Browne, M.W., Cudeck, R. (1992), Alternative ways of assessing model fit. *Sociological Methods Research*, 21(2), 230-258.
- Bruton, G.D., Chen, J. (2022), Bringing entrepreneurship and family business fully into a home in management departments. *Journal of Family Business Strategy*, 13(1), 100483.
- Bryan, J., Williams, J.M., Griffin, D. (2020), Fostering educational resilience and opportunities in urban schools through equity-focused school-family-community partnerships. *Professional School Counseling*, 23(1 Part 2), 1-14.
- Buratti, N., Sillig, C., Albanese, M. (2022), Community enterprise, community entrepreneurship and local development: A literature review on three decades of empirical studies and theorizations. *Entrepreneurship Regional Development*, 34(5-6), 376-401.
- Burhanuddin, B. (2019), The scale of school organizational culture in Indonesia. *International Journal of Educational Management*, 33(7), 1582-1595.
- Byrne, B.M. (2016), *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*. 3rd ed. Milton Park: Routledge.

- Cain, M.K., Zhang, Z., Yuan, K.H. (2017), Univariate and multivariate skewness and kurtosis for measuring nonnormality: Prevalence, influence and estimation. *Behavior Research Methods*, 49(5), 1716-1735.
- Costa, S.F., Caetano, A., Santos, S.C. (2016), Entrepreneurship as a career option: Do temporary workers have the competencies, intention and willingness to become entrepreneurs? *The Journal of Entrepreneurship*, 25(2), 129-154.
- Denanyoh, R., Adjei, K., Nyemekye, G.E. (2015), Factors that impact on entrepreneurial intention of tertiary students in Ghana. *International Journal of Business and Social Research*, 5(3), 19-29.
- DePetris, T., Eames, C. (2017), A collaborative community education model: Developing effective school-community partnerships. *Australian Journal of Environmental Education*, 33(3), 171-188.
- Eesley, C., Wang, Y. (2017), Social influence in career choice: Evidence from a randomized field experiment on entrepreneurial mentorship. *Research Policy*, 46(3), 636-650.
- Epstein, J.L. (2011), *School, Family, and Community Partnership: Preparing Educators and Improving School*. Boulder: Westview Press.
- Farrukh, M., Khan, A.A., Khan, M.S., Ramzani, S.R., Soladoye, B.S.A. (2017), Entrepreneurial intentions: The role of family factors, personality traits and self-efficacy. *World Journal of Entrepreneurship, Management and Sustainable Development*, 13(4), 303-317.
- Fayolle, A., Gailly, B. (2015), The impact of entrepreneurship education on entrepreneurial attitudes and intention: Hysteresis and persistence. *Journal of Small Business Management*, 53(1), 75-93.
- Foucrier, T., Wiek, A. (2019), A process-oriented framework of competencies for sustainability entrepreneurship. *Sustainability*, 11(24), 1-18.
- Fuentelsaz, L., Maicas, J.P., Montero, J. (2018), Entrepreneurs and innovation: The contingent role of institutional factors. *International Small Business Journal*, 36(6), 686-711.
- Gurău, C., Dana, L.P. (2018), Environmentally-driven community entrepreneurship: Mapping the link between natural environment, local community and entrepreneurship. *Technological Forecasting and Social Change*, 129, 221-231.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. (2016), *Multivariate Data Analysis*. 8th ed. Uttar Pradesh: Cengage Learning.
- Hockerts, K. (2018), The effect of experiential social entrepreneurship education on intention formation in students the effect of experiential social entrepreneurship education on intention formation in students. *Journal of Social Entrepreneurship*, 9(3), 234-256.
- Hou, F., Su, Y., Lu, M., Qi, M. (2019), Model of the entrepreneurial intention of university students in the Pearl River Delta of China. *Frontiers in Psychology*, 10, 1-16.
- Hu, L., Bentler, P.M. (1999), Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, 6(1), 1-55.
- Hunter, L., Lean, J. (2018), Entrepreneurial learning a social context perspective: Evidence from Kenya and Tanzania. *Journal of Small Business and Enterprise Development*, 25(4), 609-627.
- Jansen, S., Van de Zande, T., Brinkkemper, S., Stam, E., Varma, V. (2015), How education, stimulation, and incubation encourage student entrepreneurship: Observations from MIT, IIT, and Utrecht University. *International Journal of Management Education*, 13(2), 170-181.
- Jensen, K.W., Liu, Y., Schött, T. (2017), Entrepreneurs innovation bringing job satisfaction, work-family balance, and life satisfaction. China and around the world. *International Journal of Innovation Studies*, 1(4), 193-206.
- Kakouris, A. (2021), *Teaching creativity in entrepreneurship: Embolden or discourage? Industry and Higher Education*, 35(4), 465-470.
- Kimmitt, J., Muñoz, P., Newbery, R. (2020), Poverty and the varieties of entrepreneurship in the pursuit of prosperity. *Journal of Business Venturing*, 35(4), 1-18.
- Kirkley, W.W. (2017), Cultivating entrepreneurial behaviour: Entrepreneurship education in secondary schools. *Asia Pacific Journal of Innovation and Entrepreneurship*, 11(1), 17-37.
- Li, Z., Islam, A.Y.M.A. (2021), Entrepreneurial intention in higher vocational education: An empirically-based model with implications for the entrepreneurial community. *SAGE Open*, 11(4), 1-14.
- Liñán, F., Fayolle, A. (2015), A systematic literature review on entrepreneurial intentions: Citation, thematic analyses, and research agenda. *International Entrepreneurship and Management Journal*, 11(4), 907-933.
- Morselli, D., Ajello, A. (2016), Assessing the sense of initiative and entrepreneurship in vocational students using the European qualification framework. *Education + Training*, 58(7), 797-814.
- Nabi, G., Linan, F., Fayolle, A., Krueger, N., Walmsley, A. (2017), The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning and Education*, 16(2), 277-299.
- Narmaditya, B.S., Wardoyo, C., Wibowo, A., Sahid, S. (2024), Does entrepreneurial ecosystem drive entrepreneurial intention and students' business preparation? Lesson From Indonesia. *Journal on Efficiency and Responsibility in Education and Science*, 17(2), 178-186.
- Nowiński, W., Haddoud, M.Y. (2019), The role of inspiring role models in enhancing entrepreneurial intention. *Journal of Business Research*, 96, 183-193.
- Özcan, G., Aktaş, I., Gülözer, K. (2020), Developing the scale on discipline expectations of students: A validity and reliability study. *International Journal of Evaluation and Research in Education*, 9(4), 840-846.
- Plessis, A.J. (2016), The importance of training and education for New Zealand entrepreneurs: Some empirical evidence. *Journal of Community Positive Practices*, 16(2), 18-38.
- Podsakoff, P.M., Podsakoff, N.P., Williams, L.J., Huang, C., Yang, J. (2023), Common method bias: It's bad, it's complex, it's widespread, and it's not easy to fix. *Annual Review of Organizational Psychology and Organizational Behavior*, 11, 17-61.
- Purwana, D., Effendi, M.S., Adha, M.A., Musyaffi, A.M. (2025), Entrepreneurship education as a catalyst for sustainability: Linking innovation, intention, and business models. *International Review of Management and Marketing*, 15(3), 119-129.
- Rauch, A., Hulsink, W. (2015), Putting entrepreneurship education where the intention to act lies: An investigation into the impact of entrepreneurship education on entrepreneurial behavior. *Academy of Management Learning and Education*, 14(2), 187-204.
- Rönkkö, M., Cho, E. (2020), An updated guideline for assessing discriminant validity. *Organizational Research Methods*, 25(1), 6-14.
- Shanine, K.K., Madison, K., Combs, J.G., Eddleston, K.A. (2022), Parenting the successor: It starts at home and leaves an enduring impact on the family business. *Entrepreneurship Theory and Practice*, 47(4), 1093-1131.
- Shen, T., Osorio, A.E., Settles, A. (2017), Does family support matter? The influence of support factors on entrepreneurial attitudes and intentions of college students. *Academy of Entrepreneurship Journal*, 23(1), 24-43.
- Shkabatur, J., Bar-El, R., Schwartz, D. (2022), Innovation and entrepreneurship for sustainable development: Lessons from Ethiopia. *Progress in Planning*, 160, 100599.
- Shu, Y., Ho, S.J., Huang, T.C. (2020), The development of a sustainability-oriented creativity, innovation, and entrepreneurship education

- framework: A perspective study. *Frontiers in Psychology*, 11, 1878.
- Siddoo, V., Sawattawee, J., Janchai, W., Thinnukool, O. (2019), An exploratory study of digital workforce competency in Thailand. *Heliyon*, 5(5), e01723.
- Soleimanof, S., Morris, M.H., Jang, Y. (2021), Following the footsteps that inspire: Parental passion, family communication, and children's entrepreneurial attitudes. *Journal of Business Research*, 128, 450-461.
- Suratno, Narmaditya, B.S., Wibowo, A. (2021), Family economic education, peer groups and students' entrepreneurial intention: The mediating role of economic literacy. *Heliyon*, 7(4), e06692.
- Tabachnick, B.G., Fidell, L.S. (2018), *Using Multivariate Statistics*. 7th ed. London: Pearson.
- Tentama, F., Yusantri, S. (2020), The role of entrepreneurial intention in predicting vocational high school students' employability. *International Journal of Evaluation and Research in Education*, 9(3), 558-563.
- Thien, L.M., Abd Razak, N., Ramayah, T. (2014), Validating teacher commitment scale using a Malaysian sample. *SAGE Open*, 4(2), 1-9.
- Timan, A., Maisyaroh, M., Wiyono, B.B., Adha, M.A., Valdez, A.V., Ariyanti, N.S. (2024), The role of three education centers in promoting entrepreneurship careers for vocational students. *Journal of Education and Learning (EduLearn)*, 18(4), 1442-1453.
- Utari, F.D., Sukidjo, S. (2020), The roles of need for achievement and family environment in stimulating entrepreneurial interest through self-efficacy. *Economia*, 16(2), 143-160.
- Varady, D., Kleinhans, R., Van Ham, M. (2015), The potential of community entrepreneurship for neighbourhood revitalization in the United Kingdom and the United States. *Journal of Enterprising Communities People and Places in the Global Economy*, 9(3), 253-276.
- Wach, D., Stephan, U., Gorgievski, M.J., Wegge, J. (2020), Entrepreneurs' achieved success: Developing a multi-faceted measure. *International Entrepreneurship and Management Journal*, 16(3), 1123-1151.
- Whittaker, T.A., Schumacker, R.E. (2022), *A Beginner's Guide to Structural Equation Modeling*. 5th ed. Milton Park: Routledge.
- Wongnaa, C., Seyram, A.Z. (2014), Factors influencing polytechnic students' decision to graduate as entrepreneurs. *Journal of Global Entrepreneurship Research*, 2(1), 2.
- Zhao, Y., St-Louis, A., Vallerand, R.J. (2015), On the validation of the passion scale in Chinese. *Psychology of Well-Being*, 5(1), 3.