
Issues and Perspectives in Business and Social Sciences

Exploring the nexus of entrepreneurial potential and entrepreneurial mentoring among TVET programme students

Norffadhillah Rofa^{1*}, Rohana Ngah¹

¹Faculty of Business Management, Universiti Teknologi MARA, Shah Alam, Malaysia

*correspondence: fadhillahrofa@gmail.com

Abstract

Malaysia government aims to foster an entrepreneurial ecosystem by launching The National Entrepreneurship Policy in 2019 to encourage TVET students to participate in entrepreneurship. TVET students are taught about business startups. This collaboration with the Ministry of Education (MoE) seeks to nurture student entrepreneurs as job creators. Issues such as salary discrimination, and competency gaps are often faced by TVET graduates. A total of 252 students from Vocational Colleges in Malaysia were selected using stratified sampling. The result found entrepreneurial students and entrepreneurial interaction have a relationship with entrepreneurial potential. Yet, no relationship was indicated between entrepreneurial potential and the entrepreneurial mentor. The study expands knowledge of TVET students' entrepreneurial potential and provides insights into entrepreneurial potential studies for Malaysian entrepreneurship academia. It also helps the public and private sectors create entrepreneurship mentoring programmes. The findings support the TVET institution's goal of becoming an entrepreneurial hub.

Keywords:

entrepreneurial potential, TVET, mentoring, entrepreneurial interaction, SEM-PLS

Received Jul, 2023

Accepted Sep, 2023

Published Jan, 2024

1. Introduction

Entrepreneurship education is emerging as a key approach to encourage entrepreneurship, specifically cultivating entrepreneurial aspirations and new business ventures (Munawar et al., 2023). Nevertheless, the journey of entrepreneurship does not end with the acquisition of theoretical knowledge and the initiation of a business venture. Entrepreneurship education and entrepreneurial support are equally crucial in ensuring the long-term success and sustainability of entrepreneurial ventures (Nchu et al., 2023; Shehu & Ahmad, 2023). Entrepreneurial education is an initial or startup learning that includes various activities and resources that help students learn more about entrepreneurship (Jáki & Huszák, 2023). Lei et al. (2023) explain that entrepreneurial support may include workshops, seminars, mentoring programmes, networking opportunities, and access to business resources and expertise. When students engage in entrepreneurship education and get support from entrepreneurial mentors, students can acquire new skills in entrepreneurship education (Prastyaningtyas et al., 2023). Moreover, entrepreneurial mentoring mechanisms are vital in providing students with the necessary guidance, encouragement, and connections to grow in their entrepreneurship education (Zhang, 2023; Passavanti et al., 2023). Mentors, or coaches, can offer valuable insights, feedback, and advice, and assist students in looking for and seizing business opportunities (Dilshodovich, 2023).

Fauchald et al. (2022) agree that entrepreneurial mentoring enables students to connect with mentors, share entrepreneurship experiences, and learn from one another.

In general, the percentage of individuals engaged in entrepreneurial activities in Malaysia currently at 4.74% of the overall population, reflects the existing entrepreneurial landscape in the country (Soebijantoro et al., 2021). While Malaysia has made progress in cultivating entrepreneurship, it falls behind some neighbouring countries such as Singapore, Indonesia, and Thailand in terms of entrepreneurial activity rates. Hutasuhut and Aditia (2021) added, Singapore shows a higher rate of 8.76%, indicating a more robust entrepreneurial ecosystem and a greater proportion of individuals involved in entrepreneurial endeavours. Leong (2008) explained the lower entrepreneurial activity rate in Malaysia suggests the need for concerted efforts to encourage and support aspiring entrepreneurs, particularly among the student population. Recognising the potential for entrepreneurship among students is crucial for fostering a vibrant and dynamic entrepreneurial ecosystem (Kantis et al., 2020). By nurturing the entrepreneurial aspirations of students, Malaysia can tap into a valuable pool of innovative and creative minds, driving economic growth and job creation (Agrawal et al., 2023).

Putro et al. (2022) identified that entrepreneurship education is one of the critical factors in increasing entrepreneurial potential. Nowiński et al. (2019) conducted a study that reinforced the positive impact of entrepreneurship education on students' entrepreneurial potential. The findings highlight that entrepreneurship education acts as a catalyst in shaping students' entrepreneurial potential. It helps foster entrepreneurial characteristics, such as creativity, innovation, risk-taking propensity, self-confidence, and resilience. These qualities are vital for individuals aspiring to embark on entrepreneurial ventures and navigate the challenges inherent in the business landscape. Pham (2018) agreed that entrepreneurship education could encourage entrepreneurial activities. Alharbi et al. (2018) concurred that entrepreneurship education has been shown to predict student business formation.

Today's entrepreneurship education is important because it equips students with the confidence and skills necessary to operate a business. This is agreed by the study conducted by Anwar et al. (2022) and Okagbue et al. (2023) indeed supported that entrepreneurship education significantly increases entrepreneurial potential. After implementing entrepreneurship education within the Technical Vocational Education and Training program (TVET), the Ministry of Education Malaysia (MoE) has taken steps to equip TVET lecturers with entrepreneurial skills. It involves providing them with training through several entrepreneurship courses (James et al., 2023; Abdullah et al., 2019). Additionally, an entrepreneurship-certified lecturer has been designated to provide students from different programmes with exposure to the concepts of entrepreneurship. Entrepreneurial mentoring is essential for aspiring students to develop entrepreneurial skills (Wilbanks, 2013). However, students often face obstacles such as a lack of mentorship (Hägg et al., 2023), funding (Singh Sandhu et al., 2011), experience (Ozen et al., 2023), difficulty in balancing schoolwork and running a business (Hartikainen et al., 2023), and insufficient networking opportunities with other businesspeople (Blažič, 2022). TVET lecturers, who are essentially upgraded lecturers from non-skilled education backgrounds, may find entrepreneurial mentoring challenging and time-consuming, potentially distracting them from their teaching and research responsibilities (Stephen & Festus, 2022). This can be particularly burdensome if they are already overwhelmed with administrative duties (Shi & Bangpan, 2022). Moreover, a lack of experience in mentoring entrepreneurs could also pose a challenge for lecturers (Davis et al., 2022). However, Lope Pihie and Bagheri (2011) mentioned that entrepreneurship lecturers or teachers should be entrepreneurial.

Hossain et al. (2023) emphasised that entrepreneurial mentoring can significantly impact the development of entrepreneurial potential among students. Mentors can offer students guidance, advice, and support in developing their entrepreneurial skills, knowledge, and attitudes (Daragmeh & Halabi, 2023). This paper argues that lecturers with entrepreneurial backgrounds are responsible for teaching entrepreneurship education to encourage entrepreneurial potential

among TVET students. This study empirically explores such elements in entrepreneurial mentoring in developing students' entrepreneurial potential exhibited by TVET students when it comes to initiating their own businesses.

2. Literature review

This section focuses on reviewing the literature related to entrepreneurial potential and the antecedents of entrepreneurial mentoring, including the roles of entrepreneurial mentors, entrepreneurial students, and entrepreneurial interactions. The goal is to develop research hypotheses and frameworks.

2.1 Entrepreneurial potential

Rofa and Ngah (2022) distinguish three important entrepreneurship concepts: entrepreneurial potential, entrepreneurial intention, and entrepreneurial readiness. Entrepreneurial potential refers to a person's propensity for entrepreneurship and correlates with creativity, risk-taking, and self-efficacy (Ćoćkalo et al., 2017). In contrast, entrepreneurial intention is the desire to start a business and is influenced by cognitive factors such as attitudes, subjective norms, and perceived behavioural control (Maheshwari et al., 2022).

Moreover, entrepreneurship readiness focuses on a person's preparedness and willingness to navigate the entrepreneurial landscape, including risk management, quick decision-making, and adaptability. Despite being a relatively new concept in entrepreneurship research, behavioural control emphasises the significance of an individual's ability to effectively respond to the challenges and demands of entrepreneurship (Olugbola, 2017; Coduras et al., 2016). By comprehending these three concepts, as highlighted by Rofa and Ngah (2022), researchers and practitioners can develop interventions and programmes to support and promote entrepreneurship. The clarity in these areas facilitates the advancement of knowledge and the growth of the field of entrepreneurship.

When embarking on a business venture, young individuals and college graduates are more prone to exhibit higher entrepreneurial potential compared to non-graduates with lower potential for entrepreneurship (Makwara et al., 2023). This finding suggests that entrepreneurial education and age are important factors in developing entrepreneurial potential. Aside from that, exposure to a wide range of experiences, a willingness to take risks, and creative prowess are just a few of the qualities and experiences that young people and recent college graduates possess that make them ideal candidates for entrepreneurial endeavours (Sarwar et al., 2023). Since entrepreneurial education is identified as one of the most critical factors in developing entrepreneurial potential, Tiberius et al. (2023) have listed courses such as marketing, accounting, and finance, which are important among others. By equipping these students, they may obtain entrepreneurial skills, which can be essential for starting and running a business in the future.

2.2 Entrepreneurial mentoring

Khelifi (2023) highlights the importance of mentoring in influencing students' entrepreneurial potential. Mentoring programmes can provide students with practical knowledge, guidance, and support essential for entrepreneurship. This support can be in advice, access to networks, and financial resources. Entrepreneurial mentoring provides students with guidance, advice, and support from experienced entrepreneurs or professionals (Zhang & Nong, 2023). Mentors can share their knowledge, experiences, and best practices, which can help students to refine their ideas and develop their entrepreneurial skills further. By combining entrepreneurship education

and mentoring, students can develop comprehensive understanding of entrepreneurship, which can help them visualise and create their businesses (Zen et al., 2023; Zeng et al., 2023).

Bist (2023) adds that students representing the next generation of entrepreneurs play a vital role in job creation and economic development. Consequently, Higher Education Institutions (HEIs) could shape future employers by offering entrepreneurship education and mentoring programmes (Kintu et al., 2019). Government initiatives and policymaker actions also play a crucial role in fostering the entrepreneurial potential of young individuals, as they contribute to inspiring and motivating young people to pursue entrepreneurship (Poon et al., 2023).

Entrepreneurial mentoring is recognised worldwide as an effective method to train and motivate new business owners (Annas & Melinda, 2023). It involves providing aspiring entrepreneurs with guidance and support from experienced professionals (Nate et al., 2022). Madu and Okunna (2023) confirm that mentorship facilitates practical knowledge acquisition and entrepreneurial skill development, leading to successful ventures. Thus, this study explores students' entrepreneurial potential by considering the demonstration of the effectiveness of mentoring. Ting et al. (2017) classified entrepreneurial mentoring as consisting of mentors, students, and interaction.

2.3 Entrepreneurial mentor

Mentors can play various roles, including leaders, models, coaches, teachers, advisors, counsellors, and even "buddies," to assist their mentees (Kent et al., 2003). Entrepreneurial mentors help students evaluate business opportunities, develop business plans, and manage business risks (Prastyaningtyas et al., 2023; Bist, 2023). An entrepreneurial mentor, in the context of this study, refers to a TVET lecturer accredited and certified to help students develop entrepreneurial skills and mindset (Njenga, 2023). According to Musyimi and Mwasiaji (2023), TVET students require mentors with entrepreneurial experience. As a result, an entrepreneurial mentor assists students in developing entrepreneurial skills (Susanto, 2023). Students can be inspired and motivated to pursue their entrepreneurial goals by a passionate, dedicated, and genuinely invested entrepreneurial mentor (Shymko & Khoury, 2023). As a result, young entrepreneurs require qualified, committed mentors to share their knowledge and experience (Prastyaningtyas et al., 2023).

H1: Entrepreneurial mentor has a positive relationship with entrepreneurial potential.

2.4 Entrepreneurial students

Entrepreneurial students have unique traits that set them apart from others, such as motivation, innovation, and a strong desire to build successful businesses. According to Bejinaru et al. (2023), an entrepreneurial student has an entrepreneurial mindset and actively engages in entrepreneurial activities while pursuing their education. These students strongly desire to create and innovate and frequently look for opportunities to apply their skills and knowledge in a business setting (Adeel et al., 2023).

Within a TVET programme, students' entrepreneurial learning can be fostered as they follow their mentors' instructions (Khieng et al., 2019). Their young age, which ranges from 15 to 19 years old, allows mentors to easily instil discipline and positive entrepreneurial habits (Hastuti & Maslamah, 2023). Student's willingness to follow instructions and acknowledge feedback aids learning and entrepreneurship (Bazkiaei et al., 2020). However, student's willingness is subjective and may not apply universally (Shah et al., 2020). Each student has a unique personality and circumstances (Singh & Mehdi, 2022).

Sunny and Ismail (2023) explained that TVET programmes emphasise practical skills to improve career prospects and employability. TVET programmes are accessible and tailored to diverse

students who may have struggled in traditional academic settings (Song & Chea, 2023). Entrepreneurial subjects like business planning, market research, financial management, and marketing skills help students identify and pursue entrepreneurial opportunities (Djubaedi et al., 2023). Indeed, entrepreneurship education in TVET programmes gives students the skills to succeed in the entrepreneurial world, regardless of their entrepreneurial potential (Padi et al., 2022).

H2: Entrepreneurial student has a positive relationship with entrepreneurial potential.

2.5 Entrepreneurial interaction

Jackson (2022) elaborates that by interacting with a mentor, an entrepreneurial student can learn about different aspects of entrepreneurship and receive guidance on overcoming common obstacles. Lowell and Yang (2023) explained that the interactions can provide feedback that help students grow their businesses and confidence. Assenova (2020) studied that mentors provided the knowledge, skills, and resources required to develop entrepreneurial potential, making the conversation between mentor and student highly impactful. The mentor's guidance and support stimulate success, providing the necessary direction, support, and networking opportunities to launch and grow a business (Bozward et al., 2023).

H3: Entrepreneurial interaction has a positive relationship with entrepreneurial potential.

Figure 1 depicts the study's framework. The independent variables are entrepreneurial mentors, entrepreneurial students, and entrepreneurial interaction. The dependent variable is entrepreneurial potential.

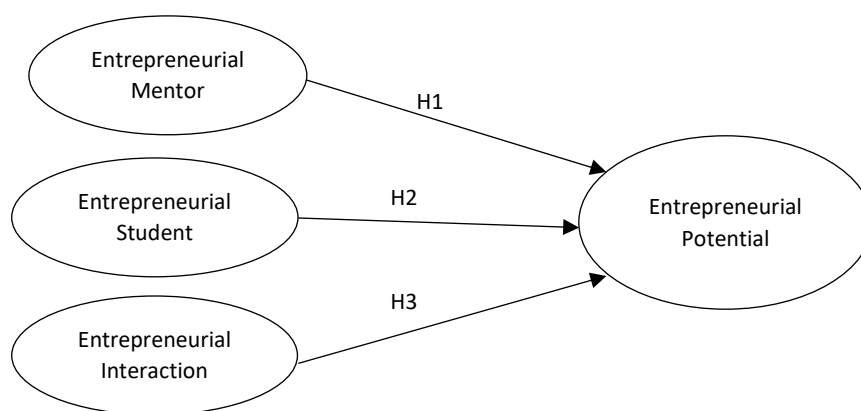


Figure 1: The Framework of Study

3. Methodology

The population of TVET students was 61,870 as of 2019 (Ministry of Education Malaysia, 2019) covering vocational colleges in the states of Malaysia, Sabah, and Sarawak. Stratified sampling was employed, and the data collection was carried out through online. A total of 382 students were selected as the maximum target, ensuring accuracy and representation for the entire population (Krejcie & Morgan, 1970; Huang & Zhang, 2023). The survey was distributed to final-year students who had taken entrepreneurship education at vocational colleges. The survey link was emailed to the principal of each vocational college and shared via WhatsApp with entrepreneurship lecturers and their groups of students. A total of 500 online questionnaires

were distributed and 252 questionnaires were completed and usable, indicating 50.4 percent of response rate. Nulty (2008) explained the response rate was consistent with the response rate in education for online surveys which ranged from 20 to 50 percent. The survey obtained responses from a diverse range of vocational colleges across the country. Ting et al. (2017) deployed and modified measurement instruments to evaluate entrepreneurial mentoring, and Colakoglu and Gozukara (2016) used and modified measurement instruments to assess entrepreneurial potential. Table 1 displays specific item measurements which consist of entrepreneurial mentor, entrepreneurial student, and entrepreneurial interaction. For clarity, the survey used a five-point Likert scale, and Partial Least Squares Structural Equation Modelling (SEM) for data analysis. It is because of its dependability and ability to run multiple analyses concurrently. The SEM framework contained two models: the measurement model for testing the outer model and the structural model for validating the inner model. This method produced consistent results for the study.

Table 1: Item Measurements

Variables	Measurements
Entrepreneurial Mentor (M)	<ul style="list-style-type: none"> • The lecturer/mentor is enthusiastic and open-minded. • The moral quality of the lecturer/mentor is excellent. • The lecturer/mentor is willing to listen.
Entrepreneurial Student (P)	<ul style="list-style-type: none"> • I am a very outgoing person. • I have the initiative to learn. • I have a solid knowledge of basic entrepreneurial skills.
Entrepreneurial Interaction (Int)	<ul style="list-style-type: none"> • The communication mode between my lecturer/mentor and myself is appropriate. • The communication content between my lecturer/mentor and myself is useful. • My lecturer/mentor and I can get along well. • My lecturer/mentor and I trust each other. • My lecturer/mentor and I have a similarity of preferences.
Entrepreneurial Potential (EntP)	<ul style="list-style-type: none"> • I am ready to do anything to be an entrepreneur. • My goal is to be a professional entrepreneur. • I am determined to create a business venture in the future. • I do not have doubts about starting my own business in the future. • I have a strong intention to start a business in the future. • My academic qualification will contribute to my interest in starting a business.

4. Results and finding

The finding presented responses from male students about 46.4% and female students about 53.5%. The responses from TVET programmes of social community service is 48.4%, agriculture is 40%, and business is 37.5%. While technology and communication programme shows the smallest figure at 9.12%. The hospitality programme accounts for 4.76%. Response profile information is displayed in Table 2.

Table 2: Profile Information

Demographic	Item	Frequency	Percentage
Gender	Male	117	46.4
	Female	135	53.5
TVET Programme	Business	95	37.6
	Agriculture	10	40
	Engineering	101	4.36
	IT & Communication	11	9.12
	Tourism & Hospitality	23	4.76
	Social Community Service	12	48.4

4.1 The measurement model

Convergent validity, internal reliability, and discriminant analysis can be used to evaluate a measurement model. According to Chin (2009), these techniques can be used to evaluate the measurement model, which considers the loadings, reliability, and validity of the measures employed to represent each construct. Hair et al. (2017) recommend that the loadings should exceed 0.7. Kline's (2011) suggestions show that the average extracted variance and composite reliability of the variables were both above the 0.5 and 0.7 thresholds. Convergent validity is shown by the fact that the measures of the variables/constructs are good enough. In Table 3, the variables and constructs for convergent validity are shown. Thus, the condition of convergent validity has been met. Convergent validity and discriminant analysis had been performed and all items are found valid for further testing.

Table 3: Convergent Validity Analysis

Variable	Construct	Loadings	CR	AVE
Entrepreneurial Mentor	M1	0.917	0.929	0.814
	M2	0.882		
	M3	0.909		
Entrepreneurial Student	S1	0.803	0.866	0.683
	S2	0.822		
	S3	0.854		
Entrepreneurial Interaction	Int1	0.848	0.911	0.672
	Int2	0.783		
	Int3	0.866		
	Int4	0.848		
	Int5	0.749		
Entrepreneurial Potential	EP 1	0.831	0.948	0.751
	EP 2	0.889		
	EP 3	0.887		
	EP 4	0.869		
	EP 5	0.896		
	EP 6	0.825		

Note: CR: Composite Reliability, AVE: Average Variance Extracted.

4.2 The structural model

The evaluation of the measurement model is satisfactory. Standard evaluation criteria include the coefficient of determination (R^2), the blindfolding-based cross-validated redundancy measure Q^2 , and the statistical significance and relevance of the path coefficients. Before assessing the structural relationships, Hair et al. (2017) suggested that collinearity must be examined to avoid bias in the regression results. Regarding the prevalent method bias of PLS-SEM, Kock (2015) proposes a comprehensive collinearity assessment strategy. According to Hair et al. (2017) and Kock (2015), the ideal VIF values are between 2 and 3. The evaluation revealed that most VIF values are close to 3 or lower. Some items are more significant than 3 but less than 5, and VIF values above 5 suggest potential collinearity issues among the predictor constructs. Since collinearity is not a concern, the following step is to examine the R^2 value. The entrepreneurial mentoring elements contributed 48.6 percent variance explaining entrepreneurial potential. Henseler et al. and Hair et al. (2011), state that R^2 values of 0.75, 0.50, and 0.25 are considered substantial, moderate, and weak, respectively. Hence, the R^2 value in this study can be categorised as moderate. This indicates that the model effectively fits the data, as supported by Hair et al. (2019). For Q^2 values greater than 0, 0.25, and 0.50 indicate the PLS-path model's small, medium, and large predictive significance (Hair et al., 2019). In this study, the coefficient of determination ($R^2 = 0.486$) is regarded as highly predictive. According to the PLS-path model, the predictive significance of blindfolding entrepreneurial potential ($Q^2 = 0.341$) is between medium and high. Figure 2 depicts the study's structural model. Based on SRMR (Square Root Mean Residual)

values of 0.067, this model demonstrated a good model fit. It falls short of the standard value of 0.08 (Garson, 2012; Hair, 2010; Schumacker & Lomax, 2004).

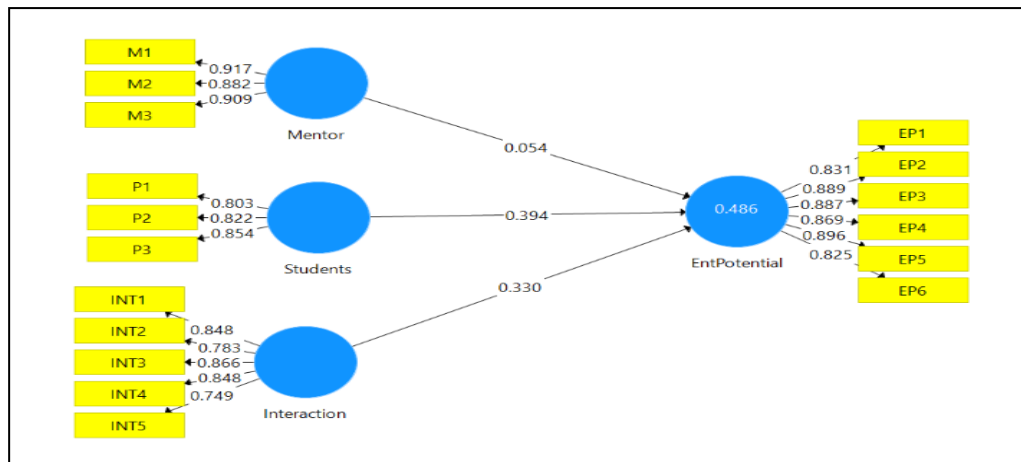


Figure 2: The structural model

Henseler et al. (2015) suggested that the heterotrait-monotrait (HTMT) ratio of correlations was used to test the discriminant analysis. HTMT is deemed superior and capable of achieving higher specificity and sensitivity rates. Ringle, and Sarstedt, (2015) highlight the HTMT values fall below the 0.90 threshold. The discriminant analysis had thus been completed and established between two reflective constructs. The discriminant analysis of the HTMT criterion is shown in Table 4.

Table 4: HTMT Criterion

	Entrepreneurial Potential	Entrepreneurial Interaction	Entrepreneurial Mentor	Entrepreneurial Student
Entrepreneurial Potential	-	-	-	-
Entrepreneurial Interaction	0.698	-	-	-
Entrepreneurial Mentor	0.479	0.802	-	-
Entrepreneurial Student	0.736	0.832	0.472	-

According to Table 5, the entrepreneurial mentor has no effect on entrepreneurial potential ($\beta = 0.054$, $t = 0.602$). As a result, H1 is not supported. Meanwhile, entrepreneurial student and entrepreneurial interaction have a significant relationship to entrepreneurial potential ($\beta = 0.623$, $t = 5.317$), and entrepreneurial interaction has a significant relationship to entrepreneurial potential ($\beta = 0.330$, $t = 3.382$), supporting both H2 and H3. Table 5 depicts a detailed path analysis of the hypotheses' direct relationship.

Table 5: The Structural Equation Modelling Result for Hypotheses

Variable	Standard Coefficient (β)	t-statistic	p-value	Conclusion
H1 : Entrepreneurial mentor has a positive relationship with entrepreneurial potential	0.054	0.602	0.547	Not Supported
H2 : Entrepreneurial student has a positive relationship with entrepreneurial potential	0.394	5.317	0.000	Supported
H3 : Entrepreneurial interaction has a positive relationship with entrepreneurial potential	0.330	3.382	0.001	Supported

5. Discussion

Entrepreneurial mentoring is an effective tool for assisting students in developing their entrepreneurial potential, with about 48.6 percent of the variability in their potential. However, various factors can impact the effectiveness of mentoring programmes. This study found that entrepreneurial mentors have an insignificant relationship with entrepreneurial potential. In fact, entrepreneurial mentors are crucial in guiding and supporting aspiring entrepreneurs on their journey toward success. Studies by Zhang (2023) displayed some mentors may focus heavily on theoretical concepts, which may not provide students with sufficient practical experience. This imbalance can hinder students' abilities to apply their knowledge effectively in real-world entrepreneurial settings. Moreover, mentors with insufficient experience (Davis et al., 2022), knowledge (Okeremi & Caesar, 2022), and lack of mentorship (Olumuyiwa et al., 2023) may not effectively guide and support students, leading to programme failure.

Then, entrepreneurial student is found to have a significant relationship with entrepreneurial potential. Since entrepreneurial education has been incorporated in TVET programmes, this integration has the potential to breed more student entrepreneurs (Hanafi et al., 2023; Rofa and Ngah, 2022). This approach not only equips students with entrepreneurial skills (Kalogiannidis et al., 2022), but also instils the creativity and innovation required for entrepreneurship (Agbonna, 2022). Moreover, this merger serves as valuable preparation for students as they transition into the workforce. Several TVET institutions have taken proactive steps by encouraging their students to engage in entrepreneurship clubs actively (Pittaway et al., 2023). As a result, this participation has emerged as a significant factor contributing to the presence of entrepreneurial students within the TVET system.

The final findings found entrepreneurial support had a significant relationship with entrepreneurial potential. Many students have ventured into entrepreneurship without adequate support from mentors (Prastyaningtyas et al., 2023). However, Zhang (2023) explained in the process of entrepreneurship in learning institution, lecturers or mentors who act as entrepreneurial mentors can provide positive emotional support to create a supportive environment for student entrepreneurs to maintain and improve their level of self-efficacy, self-confidence, and efficiency of opportunity recognition in a risky environment. Hejazi and Sadoughi (2023) added that emotional support given by lecturers or mentors could make the entrepreneurial education learning process successful among students.

A comprehensive entrepreneurial education requires a balance between theoretical knowledge and practical application (Bell, & Cui, 2023). Entrepreneurial mentors must provide guidance that includes practical experiences (Laalo et al., 2020) and real-world challenges (Gimmons, 2014). Ewim (2023) elaborates that collaborative learning environments between entrepreneurial mentoring and entrepreneurial students can further enhance students' entrepreneurial mindset and equip them with the necessary skills and experiences to navigate the entrepreneurial landscape successfully. By combining theoretical knowledge, practical experience (Avazovna, 2022), and effective mentoring (Yuan et al., 2022), students can develop a well-rounded entrepreneurial foundation and increase their likelihood of success.

6. Conclusion

Future research should investigate the entrepreneurial mentorship approach in depth, considering additional relevant dimensions and factors. Researchers must conduct comprehensive studies that closely observe and analyse entrepreneurial mentoring activities to gain deeper insights into their effectiveness and impact on students' entrepreneurial development.

To facilitate effective mentorship in TVET institutions, MoE has prepared guidelines that can serve as a blueprint for developing mentorship programmes. These programmes should focus on matching TVET students with successful entrepreneurs who can guide and inspire them. Clear timelines, well-defined mentor and mentee expectations, and a regular monitoring system should be established to ensure the effectiveness of mentorship relationships.

Furthermore, mentors should be provided with appropriate training to effectively work with students, share their expertise, and nurture their mentees' entrepreneurial potential. This training can equip mentors with the necessary skills to guide students in various aspects of entrepreneurship, such as business planning, market analysis, financial management, and networking.

Students can benefit greatly from engaging with successful entrepreneurs, investors, and other business stakeholders within the TVET institutions' environment. These interactions can provide valuable insights and networking opportunities, helping students learn about real-world entrepreneurship and gain practical knowledge and guidance.

Moreover, TVET institutions can incorporate practical experiences into the curriculum, such as entrepreneurship internships, cooperative programmes, and business plan competitions. These initiatives allow students to apply their theoretical knowledge, gain hands-on experience, and refine entrepreneurial skills. Creating an entrepreneurial culture within TVET institutions is essential to inspire and motivate future entrepreneurs. It can be achieved through promoting entrepreneurship as a viable career option, providing support and resources for aspiring entrepreneurs, and celebrating the achievements of student entrepreneurs.

In conclusion, future research should explore the details of entrepreneurial mentoring, considering additional dimensions. TVET institutions can utilise the MoE guidelines to develop effective mentorship programmes, foster connections between students and industry experts, and provide practical experiences and resources to cultivate an entrepreneurial mindset and entrepreneurial personality traits. By implementing these measures, TVET institutions can play a role in shaping and nurturing the entrepreneurial potential among TVET students.

Acknowledgement

The authors acknowledge the support received from University Teknologi MARA during the completion of this paper.

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), 2158244019861456.
- Adeel, S., Daniel, A. D., & Botelho, A. (2023). The effect of entrepreneurship education on the determinants of entrepreneurial behavior among higher education students: A multi-group analysis. *Journal of Innovation & Knowledge*, 8(1), 100324.
- Agbonna, A. R. (2022). Moderating effect of mentorship on the relationship between entrepreneurial learning and attitude towards entrepreneurship. *International Journal of Economics, Commerce and Management*, 10(1), 89–06.
- Agrawal, A. K., Tripathi, V., & Bhoyar, P. K. (2023). Understanding the interaction among motivators of entrepreneurial aspiration of university students in India. *International Journal of Enterprise Network Management*, 14(1-2), 99–121.
- Alharbi, J., Almahdi, H., & Mosbah, A. (2018). The impact of entrepreneurship education programs (EEPs) on the entrepreneurial attitudes among higher education students. *International Journal of Management, Economics and Social Sciences*, 7(3), 245–271.
- Annas, M., & Meilinda, V. (2023). A Review of Indonesian Business Start-Up Incubator Models. *Startupreneur Bisnis Digital (SABDA Journal)*, 2(1), 86–97.

- Anwar, I., Thoudam, P., & Saleem, I. (2022). Role of entrepreneurial education in shaping entrepreneurial intention among university students: Testing the hypotheses using mediation and moderation approach. *Journal of Education for Business*, 97(1), 8–20.
- Assenova, V. A. (2020). Early-stage venture incubation and mentoring promote learning, scaling, and profitability among disadvantaged entrepreneurs. *Organization Science*, 31(6), 1560–1578.
- Avazovna, O. K. (2022). Spending The Free Time Of Students Professionally, Improving Their Entrepreneurial Skills And Providing Social Support To Them. *American Journal of Pedagogical and Educational Research*, 7(2022), 129–131.
- Bazkiaei, H. A., Heng, L. H., Khan, N. U., Saufi, R. B. A., & Kasim, R. S. R. (2020). Do entrepreneurial education and big-five personality traits predict entrepreneurial intention among universities students?. *Cogent business & management*, 7(1), 1801217.
- Bejinaru, R., Neamtu, D. M., Condratov, I., Stanciu, P., & Hapenciu, C. V. (2023). Exploring the effectiveness of university agenda for developing students' entrepreneurial behavior. *Economic Research-Ekonomska Istraživanja*, 36(1), 1317–1337.
- Bell, R., & Cui, J. (2023). Addressing progressive educational reforms: Fusing acquisition approaches and participation in Chinese entrepreneurship education. *The International Journal of Management Education*, 21(1), 100748.
- Bist, A. S. (2023). The Importance of Building a Digital Business Startup in College. *Startupneur Bisnis Digital (SABDA Journal)*, 2(1), 31–42.
- Blažič, B. J. (2022). Changing the landscape of cybersecurity education in the EU: Will the new approach produce the required cybersecurity skills?. *Education and information technologies*, 27(3), 3011–3036.
- Bozward, D., Rogers-Draycott, M., Angba, C., Zhang, C., Ma, H., An, F., Topolansky, F., Sabia, L., Bell, R. & Beaumont, E. (2023). How can entrepreneurial interventions in a university context impact the entrepreneurial intention of their students? *Entrepreneurship Education*, 6(1), 1–23.
- Chin, W. W. (2009). How to write up and report PLS analyses. In In: Esposito Vinzi, V., Chin, W., Henseler, J., & Wang, H. (eds). *Handbook of partial least squares: Concepts, methods and applications* (655–690). Berlin, Heidelberg: Springer Berlin Heidelberg.
- Čočkalo, D., Đorđević, D., Nikolić, M., Stanislavljev, S., & Terek, E. (2017). Analysis of possibilities for improving entrepreneurial behaviour of young people: Research results in Central Banat district. *Journal of Engineering Management and Competitiveness (JEMC)*, 7(2), 97–108.
- Coduras, A., Saiz-Alvarez, J. M., & Ruiz, J. (2016). Measuring readiness for entrepreneurship: An information tool proposal. *Journal of Innovation & Knowledge*, 1(2), 99–108.
- Çolakoglu, N., & Gözükar, İ. (2016). A comparison study on personality traits based on the attitudes of university students toward entrepreneurship. *Procedia-Social and Behavioral Sciences*, 22(2016), 133–140.
- Daragmeh, A., & Halabi, A. (2023). A Diagnostic Study of Entrepreneurial Education Readiness in the Humanities and Social Sciences in Palestine. *Journal of Entrepreneurship, Business and Economics*, 11(1), 63–101.
- Davis, T. M., Jones, M. K., Settles, I. H., & Russell, P. G. (2022). Barriers to the successful mentoring of faculty of color. *Journal of Career Development*, 49(5), 1063–1081.
- Dilshodovich, P. D. (2023). Entrepreneurship and Start-Up Culture: Nurturing Innovation and Growth. *Procedia on Economic Scientific Research*, 4(2023), 36–41.
- Djubaedi, D., Rohadi, T., & Kodama, Y. (2023). Core Entrepreneurial Competencies for Local Content Curriculum. *International Journal of Educational Qualitative Quantitative Research*, 2(1), 12–17.
- Ewim, D. R. E. (2023). Integrating Business Principles in STEM Education: Fostering Entrepreneurship in Students and Educators in the US and Nigeria. *IJEBD (International Journal of Entrepreneurship and Business Development)*, 6(4), 590–605.
- Fauchald, R. N., Aaboen, L., & Haneberg, D. H. (2022). Utilisation of entrepreneurial experiences in student-driven mentoring processes. *The International Journal of Management Education*, 20(2), 100651.
- Garson, G. D. (2012). *Testing statistical assumptions*. G. David Garson and Statistical Associates Publishing
- Gimmon, E. (2014). Mentoring as a practical training in higher education of entrepreneurship. *Education+ Training*, 56(8/9), 814–825.
- Hägg, G., Politis, D. and Alsos, G.A. (2023). Does gender balance in entrepreneurship education make a difference to prospective start-up behaviour?, *Education + Training*, 65(4), 630–653.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modelling methods. *Journal of the academy of marketing science*, 4(5), 616–632.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24.
- Hair, J.F., Ringle, C.M. and Sarstedt, M. (2011), PLS-SEM: indeed, a silver bullet, *Journal of Marketing Theory and Practice*, 19(2), 139–151.
- Hair, J.F., (2010). *A Premier Partial Least Squares Structural Equation Modelling (PLSSEM)*. Thousand Oaks, California: Sage Publications, Inc.
- Hanafi, A. G., Ahmad, H. H., Mansor, M. F., & Mustafa, W. A. (2023). An Integrated Approach in Empowering Technical and Vocational Education and Training (TVET) for Malaysian Asnaf in the IR4. 0 Era. *Journal of Advanced Research in Applied Sciences and Engineering Technology*, 30(2), 255–271.

- Hartikainen, H., Ventä-Olkkonen, L., Kinnula, M., & Iivari, N. (2023). We were proud of our idea: How teens and teachers gained value in an entrepreneurship and making project. *International Journal of Child-Computer Interaction*, 35(2023), 100552.
- Hastuti, M., & Maslamah, M. (2023). Entrepreneurship Character Education Through The Market Day Program. *Ilmuna: Jurnal Studi Pendidikan Agama Islam*, 5(1), 57–75.
- Hejazi, S. Y., & Sadoughi, M. (2023). How does teacher support contribute to learners' grit? The role of learning enjoyment. *Innovation in Language Learning and Teaching*, 17(3), 593–606.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In R. R. Sinkovics & P. N. Ghauri (Eds.). *New challenges to international marketing: Advances in international marketing Vol 20* (277–319). Bingley: Emerald Group.
- Henseler, J., Ringle, C.M. & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135.
- Hossain, M. I., Tabash, M. I., Siow, M. L., Ong, T. S., & Anagreh, S. (2023). Entrepreneurial intentions of Gen Z university students and entrepreneurial constraints in Bangladesh. *Journal of innovation and entrepreneurship*, 12(1), 1–34.
- Ministry of Education Malaysia (2019). Vocational College. <https://www.moe.gov.my/en/tvet/vocational-college>
- Huang, L., & Zhang, Y. (2023). A Study on the Mechanism of College Students' Entrepreneurial Exit: Regulating Effect of Entrepreneurial Self efficacy and Entrepreneurial Ability. *SHS Web of Conferences*, 163. EDP Sciences.
- Hutasuhut, S., & Aditia, R. (2021). Overview of Student Entrepreneurship in Indonesia. *Proceedings of the 2nd International Conference of Strategic Issues on Economics, Business and Education (ICoSIEBE 2021)*. Atlantis Press International B.V.
- Jackson, K. (2022). Mentoring and coaching early career academics in the Asia-Pacific region: opportunities to develop individual resilience? *Asia Pacific Business Review*, 28(2), 287–296.
- Jáki, E., & Huszák, L. (2023). Lessons learned from entrepreneurship education: Foreword to the special collection. *Society and Economy*, 45(1), 1–7.
- James, S. D., Mustapha, R., Paramasivam, T., & Nashir, I. M. (2023). A survey of facility management green skills competency among TVET educators and students in a public university in Malaysia. *Proceeding on Computer and Electrical Education Research (PROCESSOR)*, 1(1), 1–22.
- Kalogiannidis, S., Loizou, E., Melfou, K., & Papaevangelou, O. (2022, September). Assessing relationship between entrepreneurship education and business growth. In *Business Development and Economic Governance in Southeastern Europe: 13th International Conference on the Economies of the Balkan and Eastern European Countries (EBEEEC), Pafos, Cyprus, 2021* (pp. 183–194). Cham: Springer International Publishing.
- Kantis, H. D., Federico, J. S., & García, S. I. (2020). Entrepreneurship policy and systemic conditions: Evidence-based implications and recommendations for emerging countries. *Socio-Economic Planning Sciences*, 72(2020), 100872.
- Kent, T., Dennis, C., & Tanton, S. (2003). An evaluation of mentoring for SME retailers. *International Journal of Retail & Distribution Management*, 31(8/9), 440–448.
- Khelifi, S. (2023). Informal university entrepreneurship: The missing link in transition higher education systems. *International Journal of Educational Development*, 97(March), 102725.
- Khieng, S., Mason, S., & Lim, S. (2019). *Innovation And Entrepreneurship Ecosystem In Cambodia: The Roles Of Academic Institutions*. Cdri Working Paper Series 118. https://cdri.org.kh/storage/pdf/wp118e_1617248421.pdf.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610.
- Kintu, D., Kitainge, K. M., & Ferej, A. (2019). An exploration of strategies for facilitating graduates' transition to the world of work: A case of technical, vocational education and training graduates in Uganda. *International Journal of Vocational Education and Training Research*, 5(1), 1–9.
- Kline, R. (2011). *Principles and practice of structural equation modeling (3rd. ed.)* New York : Guilford Press.
- Kock, N., 2015. Common method bias in PLS-SEM: a full collinearity assessment approach. *International Journal of e-Collaboration*, 11(4), 1–10.
- Laalo, H., Koskinen, H., Stenholm, P., & Siivonen, P. (2023). Shaping and negotiating entrepreneurial selves in academic entrepreneurship education. *Journal of Praxis in Higher Education*, 5(1), 69–92.
- Lei, J., Indiran, L., Ramakrishna, Y., Raju, P., & Kohar, U. H. A. (2023). A systematic literature review on entrepreneurship intention among engineering students: Impact of personal, academic, and social factors. In Yanamandra, R. & Indiran, L. (Eds.) *Handbook of Research on Designing Sustainable Strategies to Develop Entrepreneurial Intention* (1–28). IGI Global
- Leong, C. K. (2008). *Entrepreneurial intention: an empirical study among Open University Malaysia (OUM) students* (Doctoral dissertation, Open University Malaysia).
- Lope Pihie, Z., & Bagheri, A. (2011). Are teachers qualified to teach entrepreneurship? analysis of entrepreneurial attitude and self-efficacy. *Journal of Applied Sciences*, 11(18), 1–8.
- Lowell, V. L., & Yang, M. (2023). Authentic learning experiences to improve online instructor's performance and self-efficacy: The design of an online mentoring program. *TechTrends*, 67(1), 112–123.
- Madu, C. O., & Okunna, O. K. (2023). Assessment of implementation of national youth service corps ICT skill acquisition training programmes in Anambra State. *African Journal of Educational Management, Teaching and Entrepreneurship Studies*, 8(1), 36–49.
- Maheshwari, G., Kha, K. L., & Arokiasamy, A. R. A. (2022). Factors affecting students' entrepreneurial intentions: a systematic review (2005–2022) for future directions in theory and practice. *Management Review Quarterly* 73(4), 1–68.

- Makwara, T., Sibanda, L., & Iwu, C. G. (2023). To what extent is entrepreneurship a sustainable career choice for the youth? a post-COVID-19 descriptive analysis. In Eniola, A.A., Iwu, C.G., & Opute, A.P. (Eds.) *The Future of Entrepreneurship in Africa Challenges and Opportunities Post-pandemic* (pp. 59–79). Routledge.
- Munawar, S., Yousaf, H. Q., Ahmed, M., & Rehman, S. (2023). The influence of online entrepreneurial education on entrepreneurial success: An empirical study in Pakistan. *The International Journal of Management Education*, 21(1), 100752.
- Musyimi, M. N., & Mwasiagi, E. (2023). Entrepreneurship education for small and medium business enterprises in Kajiado County, Kenya. *International Academic Journal of Economics and Finance*, 3(8), 409–424.
- Nate, S., Grecu, V., Stavytskyy, A., & Kharlamova, G. (2022). Fostering entrepreneurial ecosystems through the stimulation and mentorship of new entrepreneurs. *Sustainability*, 14(13), 7985.
- Nchu, R. M., Tengeh, R. K., & Cronje, J. (2023). A call for more entrepreneurship education in non-business programs at South African TVET colleges. *EUREKA: Social and Humanities*, 22(3), 67–78.
- Njenga, M. (2023). TVET teacher mentoring in Kenya: valued but poorly implemented. *International Journal of Mentoring and Coaching in Education*, (ahead-of-print).
- Nowiński, W., Haddoud, M. Y., Lančarič, D., Egerová, D., & Czeglédi, C. (2019). The impact of entrepreneurship education, entrepreneurial self-efficacy and gender on entrepreneurial intentions of university students in the Visegrad countries. *Studies in Higher Education*, 44(2), 361–379.
- Nulty, D.D. (2008). The adequacy of response rates to online and paper surveys: what can be done? *Assessment & Evaluation in Higher Education*, 33(3), 301–314.
- Okagbue, E. F., Ezechikulo, U. P., & Muhideen, S. (2023). The application of TPB concepts in building innovative African entrepreneurs, and effective entrepreneurship education in Africa: A way forward for Africa to Post-COVID-19 economic sustainability. In Eniola, A.A., Iwu, C.G., & Opute, A.P. (Eds.) *The Future of Entrepreneurship in Africa: Challenges and Opportunities Post-pandemic* (pp. 162–185). Routledge.
- Okeremi, A., & Caesar, L. D. (2022). Successful IT entrepreneurship in Nigeria: The contingent role of mentorship. *Journal of African Business* 24(4), 1–35.
- Olugbola, S. A. (2017). Exploring entrepreneurial readiness of youth and startup success components: Entrepreneurship training as a moderator. *Journal of innovation & Knowledge*, 2(3), 155–171.
- Olumuyiwa, O. A., Kimweli, K. M., & Modise, M. A. (2023). Comparative factors influencing entrepreneurial skills acquisition amongst students in rural universities of Sub-Sahara Africa's developing nations. *Education Sciences*, 13(3), 229.
- Ozen, C., Owaishiz, A., Dabic, M., & Daim, T. (2023). Exploring entrepreneurship in the academic environment. *Technology in Society*, 72(February), 102168.
- Padi, A., Dzisi, P. S., & Eshun, P. J. F. (2022). Entrepreneurship education in TVET institutions and entrepreneurial intentions of female students in Ghana: the social support factor. *Cogent Business & Management*, 9(1), 2137954.
- Passavanti, C., Ponsiglione, C., Primario, S., & Rippa, P. (2023). The evolution of student entrepreneurship: State of the art and emerging research direction. *The International Journal of Management Education*, 21(2), 100820.
- Pham, D. (2018). Contemporary issues in entrepreneurship research volume 7: Entrepreneurship education: New perspectives on research, policy & practice. *International Journal of Entrepreneurial Behavior & Research*, 24(1), 317–319.
- Pittaway, L., Benedict, P., Geyer, K., & Somià, T. (2023). *Entrepreneurship clubs and societies: learning benefits in practice*. SSRN. <https://ssrn.com/abstract=4404149>
- Poon, T. S. C., Wu, C. H., & Liu, M. C. (2023). Developing entrepreneurial ecosystem: a case of unicorns in China and its innovation policy implications. *Asian Journal of Technology Innovation*, advance online publication. <https://doi.org/10.1080/19761597.2022.2157849>
- Prastyaningtyas, E. W., Sutrisno, S., Soeprajitno, E. D., Ausat, A. M. A., & Suherlan, S. (2023). Analysing the role of mentors in entrepreneurship education: effective support and assistance. *Journal on Education*, 5(4), 14571-14577.
- Putro, H. P. N., Rusmaniah, R., Mutiani, M., Abbas, E. W., Jumriani, J., & Ilhami, M. R. (2022). Social capital of micro, small and medium enterprises in Kampung Purun for improving entrepreneurship education. *AL-ISHLAH: Jurnal Pendidikan*, 14(2), 1669–1680.
- Ringle, C. M., and Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1): 115–35.
- Rofa, N., & Ngah, R. (2022). Entrepreneurial personality traits towards entrepreneurial potential of TVET students in Malaysia: A PLS-SEM approach. *ASEAN Entrepreneurship Journal*, 8(3), 63-80.
- Sarwar, F., Sami, A., & Nauman, B. (2023). Personality and entrepreneurial intentions of final year business students in Pakistan: The mediating role of entrepreneurial education and social norms. *Journal of Entrepreneurship and Business Venturing*, 3(1), 81-99.
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling* (2nd ed.). Lawrence Erlbaum Associates Publishers.
- Shah, I. A., Amjed, S., & Jaboo, S. (2020). The moderating role of entrepreneurship education in shaping entrepreneurial intentions. *Journal of Economic Structures*, 9, 19
- Shehu, R. N. A., & Ahmad, N. H. (2023). Entrepreneurship education and graduate's venture creation activities: roles of entrepreneurial support and entrepreneurial capabilities. *Journal of Global Entrepreneurship Research*, 13(1), 3.

- Shi, Y., & Bangpan, M. (2022). Young people's participation experiences of technical and vocational education and training interventions in low-and middle-income countries: a systematic review of qualitative evidence. *Empirical Research in Vocational Education and Training*, 14(1), 1–42.
- Shymko, Y., & Khoury, T. A. (2023). From community rootedness to individuated entrepreneuring: The development of entrepreneurial motivation through a temporary community of practice. *Journal of Business Venturing* 38(3), 106300.
- Singh Sandhu, M., Fahmi Sidique, S., & Riaz, S. (2011). Entrepreneurship barriers and entrepreneurial inclination among Malaysian postgraduate students. *International Journal of Entrepreneurial Behavior & Research*, 17(4), 428–449.
- Singh, L. B., & Mehdi, S. A. (2022). Entrepreneurial orientation & entrepreneurial intention: Role of openness to experience as a moderator. *The International Journal of Management Education*, 20(3), 100691.
- Soebijantoro, F. H., Haryanto, S., & Haryati, S. (2021). The needs analysis of the instructional media to improve students' entrepreneur motivation in historical academic teaching. *Journal of Hunan University Natural Sciences*, 48(9), 309–316.
- Song, S., & Chea, P. (2023). Vocational Education and Training in Cambodia. In Pe Symaco, L. & Hayden, M. (Eds.). *International Handbook on Education in South East Asia* (pp. 1-24). Singapore: Springer Nature Singapore.
- Stephen, O. O., & Festus, O. O. (2022). Utilization of work-based learning program to develop employability skill of workforce (craftsmen) in construction industry towards industrial development. *Indonesian Journal of Educational Research and Technology*, 2(3), 179–188.
- Sunny, R., & Ismail, A. (2023). Exploring strategies to enhance TVET Engagement in Maldives to improve youth career development. *Journal of Technical Education and Training*, 15(1), 265–276.
- Susanto, P. C. (2023). Coaching and mentoring education to improve the competence of final-semester students. In *International Conference on Education of Suryakencana (IConnects Proceedings)*.
- Tiberius, V., Weyland, M., & Mahto, R. V. (2023). Best of entrepreneurship education? A curriculum analysis of the highest-ranking entrepreneurship MBA programs. *The International Journal of Management Education*, 21(1), 100753.
- Ting, S. X., Feng, L., & Qin, W. (2017). The effect of entrepreneur mentoring and its determinants in the Chinese context. *Management Decision*, 55(7), 1410–1425.
- Wilbanks, J. E. (2013). Mentoring and entrepreneurship: Examining the potential for entrepreneurship education and for aspiring new entrepreneurs. *Journal of Small Business Strategy*, 23(1), 93–101.
- Yuan, C. H., Wang, D., Hong, L., Zou, Y., & Wen, J. (2022). Coming back home to start up a business? A comparison between youth from rural and urban backgrounds in China. *Frontiers in Psychology*, 13(August), 962419.
- Zen, A., Kusumastuti, R., Metris, D., Gadzali, S. S., & Ausat, A. M. A. (2023). Implications of entrepreneurship education as a field of study for advancing research and practice. *Journal on Education*, 5(4), 11441–11453.
- Zeng, L., Ye, J. H., Wang, N., Lee, Y. S., & Yuan, J. (2023). The learning needs of art and design students in chinese vocational colleges for entrepreneurship education: from the perspectives of theory of entrepreneurial thought and action. *Sustainability*, 15(3), 2366.
- Zhang, X. (2023). Research on the influence of entrepreneurial mentor support behavior on college students' entrepreneurial opportunity identification. *Journal of Innovation and Development*, 2(2), 26–30.
- Zhang, X., & Nong, S. (2022). Reflections on entrepreneurship education in the context of information technology: how entrepreneurship tutors affect the identification of entrepreneurship opportunities for college students. In *2022 3rd International Conference on Artificial Intelligence and Education (IC-ICAIE 2022)* (pp. 415-420). Atlantis Press.