

The Influence of Entrepreneurship Support Programs and Compulsory Entrepreneurship Courses on the Career Prospects of TVET Alumni: A Case Study in Malaysian Polytechnics

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Abstract—Entrepreneurship education has been widely implemented across Technical and Vocational Education and Training (TVET) institutions in Malaysia to produce graduates capable of driving national economic growth. However, the low rate of TVET graduates entering the business sector post-graduation remains a critical topic of academic and policy debate. Therefore, this study aims to examine the influence of the Entrepreneurship Support Program (ESP) and the Compulsory Entrepreneurship Course (CEC) on career prospect selection trends among TVET alumni. Utilising a quantitative approach, this case study involved the random sampling of 170 respondents from the 2025 premier polytechnic alumni cohort across the Departments of Commerce, Civil Engineering, Mechanical Engineering, and Electrical Engineering. Data were analysed using correlation and multiple regression analyses. The empirical findings indicate that both independent variables have a significant positive relationship with the career prospects selected by the alumni. However, multiple regression analysis demonstrates that the Compulsory Entrepreneurship Course exerts a far more dominant and significant influence ($t = 8.187$, $p = 0.000$) compared to the Entrepreneurship Support Program ($t = 1.728$, $p = 0.008$). This study offers critical insights and strategic guidance for TVET institutional management and educators to enhance the technology-driven compulsory entrepreneurship curriculum, thereby boosting graduate readiness to navigate real-world industrial landscapes.

Keywords: TVET; Entrepreneurship; Career; Alumni; Polytechnic

1. INTRODUCTION

Entrepreneurship education within higher education institutions, particularly within the Technical and Vocational Education and Training (TVET) ecosystem, plays a vital role in producing highly skilled human capital endowed with sustainable entrepreneurial attributes. Recognizing this significance, the Ministry of Higher Education (MOHE) launched the Higher Education Institution Entrepreneurship Action Plan 2021–2025 on January 02, 2021, alongside the Integrated Entrepreneurship Education Guide for IPTs. This strategic initiative was implemented to infuse an entrepreneurial mindset into the national education system, thereby fostering holistic, balanced, and self-reliant TVET graduates capable of acting as job creators.

Broadly speaking, entrepreneurship serves not only as a platform for individual income generation but also acts as a primary catalyst for restructuring the national economy (Lilanka et al., 2021). In the modern era, TVET graduates are required to master high levels of knowledge, innovation, and technical skills to compete globally and navigate the challenges of the Fourth Industrial Revolution (IR 4.0). Consequently, TVET institutions bear the significant responsibility of ensuring students are equipped with robust entrepreneurial foundations before entering the labour market (Mazdan, 2011). This objective is pursued through a dual approach: extra-curricular support programs (such as seminars and campaigns) and compulsory courses integrated into the formal academic syllabus.

Before the post-COVID-19 pandemic era, graduate perception of the business sector was relatively low, as the majority preferred conventional employment (Jabatan Perangkaan Malaysia, 2022). This failure to view entrepreneurship as a viable career path ultimately exacerbated youth unemployment rates in Malaysia. However, the post-pandemic landscape has witnessed a positive shift. Entrepreneurship is increasingly recognised as a primary option for school leavers and TVET graduates to sustain their livelihoods and build stable economic status. To sustain this positive trend, critically evaluating the effectiveness of current entrepreneurship education models in TVET institutions both compulsory courses and support programs is essential to identify the factors that most heavily influence the career decisions of alumni.

Despite the active promotion of the entrepreneurial agenda at the national level, statistics indicate that the participation rate of the public and graduates in this sector remains worryingly low. According to the 2018 Global Entrepreneurship Monitor (GEM) Report, only 18.3% of the Malaysian population intended to venture into entrepreneurship. This figure is remarkably low compared to neighbouring ASEAN nations such as Indonesia (28.1%) and Thailand (37.4%), and lags far behind countries like Colombia (52.5%) (Meyer et al. 2018). If this reluctance persists, government efforts to elevate entrepreneurship will stall due to a lack of interest among students and graduates to adopt entrepreneurship as their primary career choice.

Ironically, the post-COVID-19 pandemic era revealed that approximately 60% of Malaysians attempted to maintain active participation in the business sector. However, a substantial portion of these new entrepreneurs reported a pervasive fear of financial loss, causing their businesses to collapse over the long term. This lack of resilience and risk aversion reflects a significant gap in the entrepreneurial mindset preparation provided to students before graduation. To

curb youth unemployment and boost the current economy, institutional entrepreneurial frameworks must be critically re-evaluated. Hence, this study is conducted to identify the extent to which entrepreneurship support programs and compulsory courses in TVET institutions influence and shape the career prospects of graduates. This evaluation is vital to determine whether current academic initiatives genuinely cultivate self-reliant TVET graduates or if structural re-engineering is required to address post-graduation unemployment.

2. RESEARCH METHODS

2.1 Entrepreneurship Support Program (ESP) Factors

Within the TVET paradigm, shifting the conventional, wage-employment mindset among graduates toward sustainable self-employment is critical to mitigating youth unemployment. To achieve this, educational institutions act as primary platforms for cultivating a workforce that is both professional and creative. In Malaysian polytechnics, this institutional support explicitly manifests through extra-curricular entrepreneurship programs (SPK), including expert lecture series, industry seminars, and digital entrepreneurship programs designed to expose students to contemporary business technologies. These external activities are strategically designed to provide early motivation and practical experience.

However, international scholarship emphasises that the pedagogical mechanism of extra-curricular support programs operates primarily as an inspirational trigger rather than a deep structural intervention. While localised studies indicate that these programs enhance basic employability skills, global empirical evidence suggests that optional, non-credit-bearing activities often suffer from self-selection bias, attracting students who are already predisposed to entrepreneurship while failing to engage the broader, risk-averse student population (Preedy & Jones, 2022; Pittaway et al., 2021).

Furthermore, transient co-curricular exposures lack the high-accountability mechanisms required to build long-term psychological resilience against business failure. Consequently, while extra-curricular programs are excellent for expanding students' professional networks and providing early market insights, international literature argues they must be heavily integrated with formal curricula to translate temporary inspiration into permanent vocational action (San-Martín et al., 2021).

2.2 Compulsory Entrepreneurship Course (CEC) Factors

Formal entrepreneurship education integrated directly into the academic curriculum has proven effective in increasing structural awareness and transforming students' self-concepts, thereby encouraging active participation in the business sector. This formal structure is implemented by embedding compulsory entrepreneurship courses (KWK) within the core syllabus of TVET programs. However, the efficacy of these courses is frequently questioned when graduates continue to display low entrepreneurial traits post-graduation. To resolve this operational gap, international peer-reviewed research dictates that three core dimensions must be optimised:

- a. Curricular Restructuring: Institutions must implement rigorous interventions to improve subject outcomes, ensuring course content moves beyond traditional, static, and purely theoretical activities toward experiential, action-oriented learning models (Neck & Corbett, 2018).
- b. The Role of Lecturers: Educators bear the primary responsibility of diversifying teaching and learning (T&L) methods to actively stimulate student interest, shifting from traditional instructors to experiential facilitators of business creation (Kakouris & Georgiadis, 2024).
- c. Media Utilisation: The explosive growth of the digital entrepreneurial landscape must be fully leveraged by lecturers and students through structural business planning tools, such as the Business Model Canvas (BMC), to facilitate real-time market simulations.

2.3 Entrepreneurship Career Prospect Selection

Choosing entrepreneurship as a future career depends not only on educational factors but is also strongly driven by behavioural and attitudinal dimensions. These behavioural and attitudinal dynamics are shaped by environmental influences and formally learned within institutions. Early, progressive exposure can foster positive personality traits among TVET graduates, enabling them to build their own business empires (Zainol et al. 2018). Consequently, TVET institutions are responsible for instilling comprehensive entrepreneurial competencies. TVET students must be guided to become highly perceptive in identifying market opportunities, possess high self-confidence, exhibit a willingness to take calculated risks, and think creatively to optimise organisational efficiency through innovation, cost-effectiveness, and energy efficiency.

2.4 Holland's Career Choice Theory (1996)

This study is grounded in Holland's Career Choice Theory, also known as the Holland Typology Theory. This theory explains the relationship between vocational behaviour (skills) and the work environment, providing practical guidelines to assist individuals in career decision-making, job transitions, and achieving job satisfaction. Holland (1973) emphasised that career choice is a reflection of an individual's self-concept and personality. Congruence between personality type and the work environment ensures stability and enhanced performance. Holland (1996) outlined six primary personality

types influencing human behaviour. Among these, the "enterprising" personality profile is the most dominant in shaping entrepreneurial behaviour. Enterprising individuals are characterised by enthusiasm, energy, a fondness for challenges, independent thinking, ambition, optimism, strong communication skills, leadership capabilities, and high motivation. Conversely, they dislike highly systematic, abstract tasks or duties that are strictly monitored and controlled by others. Understanding these personality elements helps TVET graduates make informed career path decisions when choosing entrepreneurship post-graduation.

2.5 Research Objectives

The primary objective of this study is to examine the influence of entrepreneurship support programs and compulsory entrepreneurship courses on the selection of entrepreneurial career prospects among TVET alumni (Case Study: Politeknik Malaysia). Specifically, the objectives are:

- To identify the influence of the Entrepreneurship Support Program (ESP) factor on the selection of entrepreneurial career prospects among TVET alumni.
- To identify the influence of the Compulsory Entrepreneurship Course (CEC) factor on the selection of entrepreneurial career prospects among TVET alumni.

2.6 Research Questions

To achieve the stated objectives, this study addresses the following research questions:

- Does the Entrepreneurship Support Program (ESP) factor influence the selection of entrepreneurial career prospects among TVET alumni?
- Does the Compulsory Entrepreneurship Course (CEC) factor influence the selection of entrepreneurial career prospects among TVET alumni?

2.7 Research Respondents and Sampling Framework

The target population for this study comprises the 2025 graduating cohort of Technical and Vocational Education and Training (TVET) alumni from Premier Politeknik. Utilising a quantitative approach with a survey research design, a random sampling technique was executed to recruit 170 respondents across four primary academic clusters: the Department of Commerce, Department of Civil Engineering, Department of Mechanical Engineering, and Department of Electrical Engineering.

2.8 Research Instrument

The questionnaire instrument was adapted from previous researchers, namely Norzulaikha Amran (2021) and Norazlinda Saad (2021). The questionnaire contains items measuring the independent variables as follows:

- Entrepreneurship Support Program Factors (17 items). Factors: Measured via a 17-item scale capturing co-curricular participation and perceived institutional support.
- Compulsory Entrepreneurship Course Factors (20 items). Factors: Measured via a 20-item scale assessing formal curriculum engagement, pedagogical delivery, and conceptual absorption.

All items were measured using a 5-point Likert scale to evaluate respondents' agreement levels, ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree").

2.9 Statistical Analysis and Data Interpretation Protocols

The collected data were processed using four primary types of analysis to answer the research objectives:

- Descriptive Analysis: Utilising frequency, percentage, mean, and standard deviation to evaluate the demographic profile of the respondents.
- Reliability Analysis: Evaluating the internal consistency of the questionnaire items.
- Pearson Correlation Test: Observing the direction and strength of the relationship between the independent variables and the dependent variable.
- Multiple Regression Test: Examining the predictive influence and determining the most dominant factor influencing the alumni's chosen career prospects.

To facilitate the interpretation of descriptive data, a mean score interpretation table was adapted from Chew and Zul Hazmi (2018), as shown in Table 1.

Table 1. Mean Score Range and Interpretation

Mean Score Range	Interpretation
- 1.89	Very Low
- 2.69	Low
- 3.49	Moderate
- 4.29	High
- 5.00	Very high

3. RESULT AND DISCUSSION

This section discusses the empirical data analysis results obtained from 170 TVET alumni respondents. The analysis encompasses demographic profiles, descriptive statistics of the variables, reliability tests, correlation matrices, and multiple regression analysis.

3.1 Demographic Profile of Respondents

Based on the collected data, the demographic profile of the participating alumni includes gender, age, TVET field of study, current business involvement status, and the timing of business commencement. The frequency and percentage analyses are detailed in Table 2.

Table 2. Demographic Profile of TVET Alumni (N = 170)

Category	Responden	Frequency (N=170)	Percentage (%)
Gender	Male	58	34.1
	Female	112	65.8
Age	20-22	104	61.2
	23-25	48	28.2
	26 and above	18	10.6
Field of Study	Jabatan Perdagangan	88	51.7
	Jab Kejuruteraan Elektrik	28	16.4
	Jab Kejuruteraan Mekanikal	24	14.1
	Jab Kejuruteraan Awam	30	17.6
Current Business Involvement?	Yes	123	72.0
	No	47	28.0
Business Commencement Timing	Upon Graduation?	58	34.0
	Six Months After Graduation?	44	26.0
	One Year After Graduation?	56	33.0
	No Intention to Run a Business	12	7.0

As illustrated in Table 2, female graduates represent the majority of the sample, with a percentage gap of 31.8% over male graduates. In terms of age distribution, the vast majority of alumni fall within the 20–22 age bracket. Regarding the specific TVET fields of study, the largest cluster consists of graduates from the Department of Commerce, totalling 88 individuals (51.8%). For current business status, a substantial majority of alumni (72.4%) were actively engaged in business activities during the study window. Furthermore, a total of 158 alumni had planned and commenced their business ventures at various intervals post-graduation, whereas only a small segment (7.1%) expressed no intention of doing so.

3.2 Descriptive Analysis of Research Variables

3.2.1 Entrepreneurship Support Program (ESP) Factors

Overall, the level of alumni involvement and perception regarding the influence of institutional entrepreneurship support programs is at a Moderate level, with an overall mean score of 3.25 and a standard deviation of 0.81. The highest score was recorded for item C7 (attended a marketing literacy program at the institution) with a frequency of 78 respondents (45.8%), demonstrating that TVET alumni received high-quality external exposure, including direct industry experience sharing. Conversely, the lowest score was recorded for item C3 (sold goods among peers), involving only 6 individuals (3.25%). This indicates that some alumni rarely participated in micro-scale open-market practical activities, contributing to a lack of self-confidence or shyness in business, which stems from a lack of regular entrepreneurial activities during their studies.

Table 3. Descriptive Statistics for ESP Factors

Item	Behaviour	Mean	Standard Deviation	Overall Score
C1	Participated in Entrepreneurship Support Programs (ESP)	3.25	0.81	Moderate

3.2.2 Compulsory Entrepreneurship Course (CEC) Factors

In contrast to the support programs, alumni feedback regarding the impact of the compulsory entrepreneurship course embedded in the formal curriculum registered a High/Very High level. On average, the mean score for this variable reached 4.48 with a standard deviation of 0.96. The highest score was found in item C4 (enjoy discussing business ideas with others at the institution), reaching 154 respondents (90.5%). This proves that the compulsory curriculum successfully provides the structural knowledge and strategic space required for brainstorming business model proposals, such as the Business Model Canvas (BMC), under lecturer guidance during the T&L process. The lowest score was shown in item C11 (listening to business advice from family), with only 22 individuals (12.9%) agreeing. This reflects that a minority

of alumni uninterested in business prefer wage employment or rely blindly on environmental cues without conducting realistic market research on community needs.

Table 4. Descriptive Statistics for CEC factors

Item	Behaviour	Mean	Standard Deviation	Overall Score
C1	Completed the Compulsory Entrepreneurship Course (CEC)	4.48	0.96	High

3.3 Data Reliability Analysis

Instrument reliability was measured using Cronbach's alpha values to assess internal consistency. According to Mohd Nasir Rayung (2022), alpha values between 0.50 and 0.80 are acceptable, whereas values exceeding 0.80 are deemed excellent and highly relevant. As illustrated in Table 5, both variables recorded alpha values exceeding 0.90, confirming that the research instrument possesses high internal consistency and data reliability.

Table 5. Reliability Analysis Results

Variable	Cronbach's Alpha Value	Number of Items
Entrepreneurship Support Program (ESP)	0.936	17
Compulsory Entrepreneurship Course (CEC)	0.961	20

3.4 Pearson Correlation Analysis

The Pearson Correlation Test was conducted to examine the direction and strength of relationships between the independent variables and the dependent variable at a significance level of $p < 0.01$.

Table 6. Symmetrical Pearson Correlation Matrix

Variable	Mean Score	ESP	CEC	Career Prospects (ESP)
Entrepreneurship Support Program (ESP)	3.25	1.000	0.814*	0.791*
Compulsory Entrepreneurship Course (CEC)	4.48	0.819*	1.000	0.872*
Entrepreneurial Career Prospects (ECP)	3.88	0.791*	0.763*	1.000

*Correlation is significant at the 0.01 level (2-tailed).

The results in Table 6 show that all variables exhibit significant positive correlations with the entrepreneurial career prospects of TVET alumni. This implies that higher exposure to support programs and enhanced compulsory course effectiveness increase the likelihood of alumni selecting an entrepreneurial career path. Following the interpretation guidelines of Ghazali and Sufean (2018), correlation coefficients within the 0.763 to 0.872 range indicate strong and statistically significant relationships.

3.5 Multiple Regression Analysis (Influence Test)

Multiple regression analysis was executed to evaluate the predictive strength of the independent variables on the dependent variable. The magnitude of the impact was assessed using Standardised Coefficient Beta (β) and t-values.

Table 7. Multiple Regression Analysis Results

Model Variable	Beta Value (β)	t-value	Significance Level (p)
Constant	1.107	1.676	-
Entrepreneurship Support Program (ESP)	0.067	1.728	0.008**
Compulsory Entrepreneurship Course (CEC)	0.334	8.187	0.000**

Note: $R^2 = 0.642$; Adjusted $R^2 = 0.577$. Significant at the $p < 0.01$ level.

Dependent Variable: Entrepreneurial career prospect selection level among TVET alumni.

The multiple regression model demonstrates a substantial predictive capacity, with the independent variables collectively explaining 64.2% ($R^2 = 0.642$) of the total variance in the career trajectories chosen by TVET alumni. However, the individual structural paths reveal a profound divergence in predictive impact.

Dominant Influence of the Compulsory Entrepreneurship Course (KWK): This factor emerged as the most influential predictor of alumni career trajectory, yielding a t-value of 8.187 at a significance level of $p = 0.000$ ($p < 0.01$). This indicates that respondents prioritise formal academic syllabus content to equip them for industry realities post-graduation. This urgency is further driven by the shrinking market for conventional wage employment compared to self-employment benefits. Moreover, the mastery of time management skills within the course syllabus assists outstanding alumni in formulating short- and long-term strategic plans.

Influence of the Entrepreneurship Support Program (ESP): Extra-curricular support programs also exert a significant positive influence on alumni career prospects, with a t-value of 1.728 at a significance level of $p = 0.008$ ($p < 0.01$). This positive impact is driven by TVET students' preference for exploring innovative concepts through active participation in entrepreneurial activities throughout their studies. These supplementary platforms provide ample opportunities to exchange viewpoints, deliberate on commercial project proposals, and secure valuable feedback from

peers, lecturers, and external industry partners. This dynamic ecosystem trains alumni to think creatively and agilely address complex business challenges.

4. CONCLUSION

In conclusion, the level of entrepreneurial career prospect readiness among TVET alumni (Case Study: Premier Polytechnic) is generally strong. Nonetheless, the presence of unemployed graduates or those struggling to find work can be attributed to low intrinsic motivation and interest toward entrepreneurship. As observed by Hassanain (2015), graduates demonstrating high entrepreneurial competencies are significantly more likely to establish businesses post-graduation. This attitudinal strength acts as a core driver, compelling them to sacrifice time, manage risks courageously, and maintain robust resilience against business failures. This study successfully addresses both research objectives and questions. The empirical findings validate that both the entrepreneurship support program (ESP) and the compulsory entrepreneurship course (CEC) contribute positively and significantly to shaping the entrepreneurial career trajectories of alumni. The application of Holland's Career Choice Theory (1996) proved highly relevant for explaining the development of an "enterprising" personality type among TVET students via academic interventions. Implicationally, this study provides a clear foundational blueprint for lecturers and institutional administrators regarding the close relationship between academic execution quality (curriculum design and support programs) and the inflation of graduate interest in this sector. Ultimately, producing successful TVET entrepreneurs depends on individual accountability in leveraging the commercial knowledge acquired. Conversely, the secondary influence of the Entrepreneurship Support Program (ESP) implies that transient, co-curricular exposures such as attending guest lectures or isolated industry seminars to provide introductory motivation but lack the environmental intensity required to fundamentally transform a student's vocational identity. While these programs stimulate creative interest, they do not effectively bridge the psychological gap characterised by risk aversion and the fear of financial loss that often deters new graduates. This finding aligns closely with global entrepreneurship scholarship, which consistently shows that credit-bearing, assessed vocational frameworks yield significantly higher rates of long-term business resilience than optional, unstructured co-curricular activities.

7.2 Recommendations for Improvement Based on the empirical findings, several strategic recommendations are proposed to enhance TVET graduate participation in entrepreneurship: Curricular Enrichment of CEC: Since compulsory courses exert the most dominant influence, educational institutions and lecturers must regularly refine the existing syllabus to incorporate current technological developments. This ensures student readiness aligns with digital-era industrial demands. Provision of Business Risk Manuals: Institutions should develop a comprehensive practical manual or guideline to shepherd graduates through career decision-making. This guide serves as early preparation to help alumni mitigate and confront potential financial losses in real-world markets. Integrated Practical Activity Expansion: The involvement rate of TVET graduates in business can be dramatically accelerated if students regularly apply theoretical and practical elements from compulsory courses while actively participating in support initiatives like seminars, lectures, campaigns, and digital entrepreneurship activities throughout their studies. Exploration of Future Research Directions: Future research should expand its scope to investigate the root causes behind business survival failures among certain graduates post-graduation. The insights gained from such interventions are crucial for helping educational organisations, polytechnics, and other TVET institutions design more potent support structures to protect alumni entrepreneurs.

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REFERENCES

- Abd Rashid, I. M. (2020, June 8). *Keusahawanan pilihan utama mendepani pasca COVID-19*. BeritaHarian.<https://www.bharian.com.my/rencana/komentar/2020/06/697726/keusahawann-pilihan-utama-mendepani-pasca-covid-19>
- Anwar Zainol, F., Norhayate Wan Daud, W., Shamsu Abubakar, L., Shaari, H., & Abd Halim, H. (2018). *A Linkage between Entrepreneurial Leadership and SMEs Performance: An Integrated Review*. International Journal of Academic Research in Business and Social Sciences, 8(4), 104–118.
- Badariah Hj. Din, Abdul Rahim Anuar & Mariana Usman. 2016. *The Effectiveness Of The Entrepreneurship Education Program In Upgrading Entrepreneurial Skills Among Public University Students*. Procedia -Social and Behavioral Sciences, 224 (August 2015): pp. 117-123.
- Chew, F.P. & Zul Hazmi Hamad (2018). *Kemahiran Berfikir Aras Tinggi dalam Pembelajaran dan Pemudahcaraan Bahasa Melayu melalui Teknik Penyyoalan*. Jurnal Pendidikan Bahasa Melayu, 8(1), 2018, pp. 1-12
- Creswell, J. W. (2012). *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative Research*. 4th Edition. Boston: Pearson Education Inc.
- Ghazali Darusalam dan Sufean Hussin. (2018). *Metodologi Penyelidikan Dalam Pendidikan: Amalan dan Analisis Kajian* (Edisi Kedua). Kuala Lumpur: Universiti Malaya.

- Hassanain, K. & Hassanain (2015). *Integrating Zakah, Awqaf and IMF for Poverty Alleviation: Three Models of Islamic Micro Finance*. Journal of Economic and Social Thought, 2(3), 193-211.
- Hanapi, Z., Kamis, A., Kiong, T. T., & Hanapi, M. H. (2017). *Jurang integrasi kemahiran employability di Malaysia: Satu kajian empirikal graduan kejuruteraan Kolej Komuniti (Integrated employability skills gaps in Malaysia: An empirical study of Community College graduates)*. Geografi-Malaysian Journal of Society and Space, 12(3).
- Haron, Z. & Idris, A. A. (2010). *Persepsi Pelajar Terhadap Penerapan Kemahiran Generik Dalam Aktiviti Kokurikulum di Kalangan Pelajar Tahun Dua Fakulti Pendidikan, Universiti Teknologi Malaysia*, Skudai. Fakulti Pendidikan, Universiti Teknologi Malaysia. November 2, 2011.
- Holland, J.L. (1973). *Making Vocational Choice a Theory of Careers*. Eaglewood Cliffs, NJ Prentice-Hall. Scientific Research Publishing
- Jabatan Perangkaan Malaysia.(2022, 10Mei). *Statistik Tenaga Buruh Malaysia*. https://www.dosm.gov.my/v1/uploads/files/5_Gallery/2_Media/4_Stats@media/4-Press_Statement/2022/05.+MEI/STATISTIK+TENAGA+BURUH,+MALAYSIA,+MAC+&+ST1+2022.pdf
- Kementerian Pengajian Tinggi (2016). *Pelan Tindakan Keusahawanan Institusi Pengajian Tinggi:2016-2020*. Putrajaya
- Lee-Ross, D. (2017). *An Examination Of The Entrepreneurial Intent Of MBA Students In Australia Using The Entrepreneurial Intention Questionnaire*. Journal of Management Development, 36(9), 1180–1190
- Lilanka De Silva, & Ravindra Koggalage. (2021). *Current trends in entrepreneurship and technology education considering Sri Lankan and global perspectives*. International Research Journal of Modernization in Engineering Technology and Sciences, 3(2), 401-410.
- Mazdan Ali Amaran. (2011). *Pembudayaan Keusahawanan dalam Kalangan Graduan* (Tesis tidak diterbitkan). Kuala Lumpur: Universiti Malaya
- Meyer, N. & De Jongh, J. (2018). *The Importance of Entrepreneurship as a Contributing Factor to Economic Growth and Development: The Case of Selected European Countries*. Jurnal of Economics and Behavioral Studies, 10(4), 287-299.
- Mohd Nasir Rayung, Abdul Said Ambotang & Normiati Batjo (2023). *Pengaruh Pengetahuan, Aplikasi Pengetahuan dan Keupayaan Imajinasi Terhadap Kemahiran Berfikir Pelajar 1 Pusat Tingkatan Enam*, SMK Abaka, Tawau, Sabah.
- Norazlinda Saad, Surendran Sankaran. (2021). *Pengetahuan dengan Kesianaan Pelajar Program Pendidikan terhadap Kursus Keusahawanan di Universiti Utara Malaysia*. Sains Insani eISSN:0127-7871, Pusat Pengajian Pendidikan, UUM.
- Nurzulaikha Amran, Noor Aslinda Abu Seman. (2021). *Hubungan antara Faktor Sokongan Pendidikan dan Minat Pelajar dalam Bidang Keusahawanan*. Research in Management of Technology and Business Vol. 2. No 1(2021) 1499-1508.
- Ravi Nagarathanam (2015). *Hubungan Sikap, Pemikiran dan Tingkahlaku Terhadap Keinginan dalam Pemilihan Kerjaya Keusahawanan dalam Kalangan Prasiswazah India di Institut Pengajian Tinggi Sekitar Bangi*. UKM, Research Gate, 48-66.
- Wan Mohd Zaifurin Wan Nawang, Ibrahim Mamat, Nor Hayati Sa'at & Sabri Ahmad. (2016). *Entrepreneurship's intention of secondary school student in Kuala Terengganu District, Malaysia*. International Journal of Academic Research in Business and Social Sciences.
- Zainol, F. A, Daud, W.N.W. Shamsu, L. Abu Bakar, H.S & Halim, H.A (2018). *A Linkage Between Entrepreneurial Leadership and SMEs Performance: An Integrated Review*. International Jurnal of Academic Research in Business and Social Science, 8(4), 104-118.