The Role of Entrepreneurial Education and Talent Management: Enhancing Leadership Mindset of Higher Education Students in the Society 5.0 Era

Rubi'ah Sugiarti¹, Febrialdy Hendratawan², Novi Mela Yuliani³

{rubiahsugiarti@unsil.ac.id1, febrialdy@unsil.ac.id2, novimelay@unsil.ac.id3}

¹²Management Department, ³Economic Development Department, Universitas Siliwangi, Tasikmalaya, Indonesia

Abstract. This research aims to improve Leadership Mindset in the Society 5.0 era through the implementation of Entrepreneurial Education and Talent Management for college students. The Society 5.0 era integrates digital technologies such as artificial intelligence (AI) and the Internet of Things (IoT) in human life, changing the way we work, learn, and interact. Effective leadership in this era requires innovation, collaboration, and creativity. The research method used quantitative analysis with a survey involving 200 students of various higher education institutions (HEIs) in Tasikmalaya, West Java, Indonesia. Data were analyzed using Structural Equation Modelling (SEM)-Lisrel 8.8. The study results revealed that Entrepreneurial Education has a very significant influence on enhancing students' Leadership Mindset. Furthermore, Talent Management has a significant effect on Leadership Mindset. The implication of this research is that with the implementation of Entrepreneurial Education and Talent Management in higher education, it will enhance the Leadership Mindset of students who will be better prepared to face challenges and opportunities in Society 5.0.

Keywords: Leadership Mindset, Entrepreneurial Education, Talent Management, Society 5.0, Higher Education Institutions.

1 Introduction

In today's rapidly evolving Society 5.0 landscape, HEIs play a critical role in shaping the leaders of tomorrow. One key aspect that stands out is the imperative to elevate student leadership mindsets within these academic settings [1]. This elevation requires a multifaceted approach that integrates entrepreneurial education and effective talent management strategies to nurture a new breed of leaders who can thrive in the dynamic challenges of the digital age [2], [3]. However, this transformation also poses new challenges, including uncertainty in employment due to automation and digitalisation, and growing social inequality.

According to the World Economic Forum (WEF), technological developments have given rise to new roles such as artificial intelligence specialists, machine developers and information security analysts. Although the number of college graduates continues to increase, limited job opportunities are a challenge [1], [4], especially for those who are less proactive in seeking job opportunities. Data from the Central Statistics Agency (BPS) shows a decrease in the number of unemployed people in Indonesia in August 2023, but the unemployment rate among college

graduates is still high, reaching 5.18%. This is partly due to the lack of compatibility between the education curriculum and the needs of the labour market, as concluded by McKinsey, UNESCO and ILO research in 2008. Fierce competition is also an important factor behind the high unemployment rate among graduates.

In recent years, entrepreneurship has evolved deeper aspects of Entrepreneurial Education. Entrepreneurial education serves as a cornerstone in preparing students for the complexities of a society driven by innovation [5], [6] and technological advancement [7], [8]. By instilling an entrepreneurial mindset, HEIs equip students with the skills and mindset necessary to identify opportunities [9], [10], take calculated risks [10], and drive meaningful change in their respective fields [11]. This approach not only fosters a spirit of innovation but also cultivates a sense of agency and empowerment among students [7], positioning them as proactive contributors to societal progress. This has the potential to change students' perception of the challenges involved in starting their own venture [12], [13], [14], referred to as perceived behavioural control. A key focus of Entrepreneurial Education is nurturing one's intrinsic drive to start their own venture, with a higher interest noted amongst university students taking entrepreneurship courses [15], [16].

Moreover, talent management practices within Society 5.0 HEIs are essential in identifying, developing, and retaining individuals with the potential to lead and inspire. It is still important for HEIs to equip their graduates with various added skills [17], [18] that will benefit them in the future. By implementing robust talent management strategies, institutions can create environments that support the growth and development of students [17], [19], allowing them to realize their full potential and become effective leaders [19], [20] in their chosen domains. This proactive approach to talent cultivation ensures that students are equipped with the skills [15], knowledge [21], [22], and experiences [17], [23] necessary to navigate the complexities of the modern workforce [24], [25]with confidence and competence. Within the context of Society 5.0, where technological integration and human-centered values converge, the role of HEIs extends beyond academic instruction to encompass holistic development [26], [27].

This holistic approach to leadership development creates a synergy between academic excellence [28], [29], entrepreneurial acumen, and talent management, propelling students towards success in an era defined by innovation and interconnectedness. Leadership mindset is key in facing the challenges brought by Society 5.0. And to maximise the potential of leaders in this era, Entrepreneurial Education and Talent Management are two aspects that cannot be ignored. Therefore, this research aims to enhance Leadership Mindset in the era of Society 5.0 through the implementation of Entrepreneurial Education and Talent Management for students. By elevating student leadership mindsets through these integrated approaches, institutions have the opportunity to cultivate a generation of agile, innovative, and socially conscious leaders who are poised to drive positive change and shape the future of society.

2 Literature Review

2.1. Entrepreneurial Education

Entrepreneurial education, highlighted as a critical component [6] in preparing individuals for the challenges of the modern business landscape [12]. The importance of integrating

practical experiences [26], [30], mentorship, and networking into educational programs to bridge the gap between classroom theory and real-world application, ultimately nurturing a new generation of entrepreneurs poised to drive innovation and economic growth [27]. Entrepreneurial education plays a pivotal role in fostering innovation and economic development [8], equipping individuals with the skills and mindset [14], [31] necessary to navigate the complexities of entrepreneurship. Entrepreneurial education goes beyond traditional business training by emphasizing experiential learning, creativity, risk-taking, and adaptability [32]. By immersing students in real-world challenges and encouraging them to develop a proactive and opportunity-driven mindset [12], [26], [33], entrepreneurial education serves as a catalyst for empowering individuals to create their ventures and contribute meaningfully to the economy.

2.2. Talent Management

Talent Management literature underscores the critical link between effective human resource strategies [34], [35] and organizational success [25]. Key themes revolve around the identification [17], development [36], [37], and retention of top talent to sustain a competitive edge [19]. Furthermore, literature in this field often explores the impact of leadership [38] on talent development and the cultivation of a supportive organizational culture that nurtures employee growth and engagement. These include the integration of technology in talent acquisition [24], [37] and management processes [20], the growing importance of diversity and inclusion initiatives [23], and the utilization of data analytics for informed decision-making. Understanding these dynamics is crucial for organizations seeking to adapt to evolving market demands [19], [34] and secure a sustainable talent pipeline [39]. By synthesizing insights from diverse research streams, Talent Management literature offers a comprehensive framework for organizations to optimize their human capital strategies [25] and drive long-term success in today's competitive business landscape.

2.3. Leadership Mindset

Leadership mindset, as highlighted in various journal articles, is a critical aspect that shapes the effectiveness of leaders [40], [41]. Research emphasizes the significance of a growth mindset in leaders [42], where they view challenges as opportunities for growth and learning rather than obstacles. This mindset fosters resilience [43], innovation, and a willingness to take risks, essential qualities for navigating complex and dynamic business environments[42]. Furthermore, articles suggest that a leader's mindset influences organizational culture [44], employee morale, and overall performance, indicating that cultivating a positive and adaptive mindset is paramount for inspiring and guiding teams towards success.

2.4. The Relationship between Entrepreneurial Education and Leadership Mindset

Given the symbiotic nature of entrepreneurial education and leadership mindset, several emphasizes that entrepreneurial education cultivates a proactive mindset essential for effective leadership [9], fostering skills like problem-solving, innovation, and risk management. This study underscores how exposure to entrepreneurial principles in educational settings enhances individuals' ability to navigate uncertainties and complexities [10], essential attributes for successful leadership roles in dynamic environments. Leadership mindset influenced by entrepreneurial education, revealing a strong correlation between entrepreneurial traits and

leadership competencies [45]. Entrepreneurial education not only equips individuals with practical skills but also shapes their attitudes and beliefs towards leadership [46].

Furthermore, by nurturing an entrepreneurial mindset alongside leadership competencies [47], educational programs can better prepare future leaders to tackle complex challenges, drive strategic initiatives, and inspire positive change within their spheres of influence.

H1: Entrepreneurial Education has a significant effect on Leadership Mindset

2.5. The Relationship beetween Talent Management and Leadership Mindset

Scholarly articles have extensively explored the intricate relationship between talent management and leadership mindset, shedding light on how effective talent management practices can shape and enhance leadership qualities [25], [48]within organizations. Several researchers emphasizes the pivotal role of talent management in cultivating leadership mindsets, highlighting how strategic talent initiatives contribute to high-potential individuals who exhibit strong leadership attributes [20]. This study underscores the importance of aligning talent management strategies with leadership development efforts to ensure a continuous pipeline of capable leaders equipped with the skills [21], behaviors, and attitudes [25] necessary to drive organizational success. Organizations that prioritize talent management not only attract top talent but also nurture a leadership culture characterized by innovation, collaboration, and strategic thinking. By strategically aligning talent management practices with leadership development practices with leadership development practices are strategies at a conducive environment that empowers individuals to embrace leadership roles, exhibit resilience in the face of challenges, and foster a growth mindset essential for driving organizational performance and achieving sustainable success.

H1: Talent Management has a significant effect on Leadership Mindset

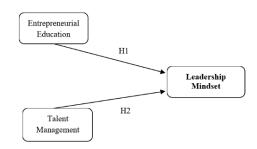


Fig. 1. Research Framework

3 Research Method

This research used a survey method which was analyzed using Structural Equation Modelling (SEM). The sample are students from HEIs in Tasikmalaya City, West Java, Indonesia. Lisrel 8.8 is used as an analytical tool to support this research. Leadership Mindset is measured using 3 (three) dimensions developed by Kangas et al. [49]: Leadership Mindset Teachability, Leadership Mindset Improvability, and Leadership Mindset Predictability, overall with 11 (eleven) question items. Measurement of Entrepreneurial Education uses 2 (two)

dimensions which consists 10 (ten) question items developed by Handayati et al. [14] with several modifications: Entrepreneurial Mindset and Entrepreneurial Intention. Talent Management uses 8 (eight) measurement dimensions developed by Wafi et al. [20], [37]: Career Adaptability, Technological Capability, Communication, Critical Thinking and Problem-Solving Skills, Leadership, Teamwork Skills, Lifelong Learning and Information Management Skills, and Ethics, Moral and Professional Skills, which modified use only 13 (thirteen) question items.

3.1. Confirmatory Factor Analysis

Validity and reliability tests in the SEM model in the Lisrel program can be carried out using the Confirmatory Factor Analysis (CFA) measurement model which will provide results in the form of a path diagram.

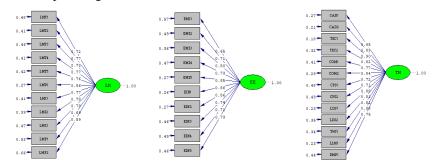


Fig. 2. Confirmatory Factor Analysis (Leadership Mindset, Entrepreneurial Education, Talent Managemet)

The minimum requirement to be considered eligible is if n = 40 then r = 0.312. So when the correlation between the item and the score is less than 0.312, the item in the instrument is declared invalid. Based on the tests displayed in the figure, the R-count values for all items on the Leadership Mindset, Entrepreneurial Education, and Talent Management variables all exceed the critical value of 0.312, which indicates that each item is valid.

Variables	Cronbach's Alpha	Critical Point	Description
Leadership Mindset	0.931	0.6	Reliable
Entrepreneurial Education	0.943	0.6	Reliable
Talent Management	0.961	0.6	Reliable

Table 1. Reliability Test

Based on the calculation results, the Cronbach's Alpha value for the Leadership Mindset variable is 0.931, and the Cronbach's Alpha value for the Entrepreneurial Education variable is 0.943, and for the Talent Management variable is 0.961. With these results, it can be concluded that all instruments used in this study are reliable. Each variable has a Cronbach's Alpha value that far exceeds the minimum limit of 0.6, indicating that the instrument is consistent in measuring what should be measured. Overall, this research instrument can be relied upon to measure the variables under study, ensuring the accuracy and consistency of the data obtained.

3.2. Analysis of the Overall Fit of the Measurement Model After Modification

In this study, researchers used the Structural Equation Modeling (SEM) method with the Lisrel program, where this method tests the overall model consisting of exogenous latent variables and endogenous latent variables. After conducting validity and reliability tests and obtaining valid results, the next step is to analyse the fit of the data with the overall model, which in Lisrel is known as Goodness of Fit (GoF). This test aims to evaluate whether the resulting model is a fit model or not. Based on the CFA measurement estimation output, the overall model fit analysis is as follows. Based on the output after modification, the following results are obtained.

No	GOF Measure	Target-Level of Fit	Estimation Result	Fit Level	
1	NCP	Small value	142.20	Good Fit	
		Interval	84.69 ; 207.78	Good Fit	
2	RMSEA	RMSEA ≤ 0,08	0.041	Good Fit	
	p (close fit)	$p \ge 0.05$	p = 0.95		
3	ECVI	Small value and close to	M* = 4.61	Good Fit	
		ECVI	S* = 5.98		
		saturated	I* = 141.42		
	AIC		M* = 917.20	Good Fit	
4		Small value and close to AIC	S* = 1190.00		
		saturated	I* = 28142.02		
	CAIC	Small value and close to	M* = 1690.89	Good Fit	
5		CAIC	S* = 3747.50		
		saturated	I* = 28289.16		
6	NFI	NFI > 0,90	0.98	Good Fit	
7	NNFI	NNFI > 0,90	0.99	Good Fit	
8	CFI	CFI > 0,90	0.99	Good Fit	
9	IFI	IFI > 0,90	0.99	Good Fit	
10	RFI	RFI > 0,90	0.97	Good Fit	
11	RMR	Standardized RMR <a> <td>0.048</td> <td>Good Fit</td>	0.048	Good Fit	
12	GFI	GFI > 0,90	0.86	Bad Fit	
13	AGFI	AGFI > 0,90	0.80	Bad Fit	

Table 1. Model Fit Results After Modification

Based on the discussion that has been carried out, it can be seen that there are 2 (two) Goodness of Fit (GOF) measures that show a poor fit, while 11 (eleven) GOF measures show a

good fit. Given that only 2 (two) GOF measures show poor model fit, it can be concluded that the overall fit of the model is good (good fit).

3.3. Structural Model Analysis

After the researcher tests the overall suitability of the model, the next step is to test the research hypothesis on the structural model. Structural model testing relates to the evaluation of coefficients or parameters that show the causal relationship or the effect of one latent variable on another latent variable. In this study, testing of the model was carried out to determine how the influence of Entrepreneurial Education and Talent Management variables on Leadership Mindset. With this test, it will be known whether the research model hypothesis is accepted or rejected. The structural model test includes the t-value of the coefficient or parameter, the value of the coefficient or parameter, and the coefficient of determination (\mathbb{R}^2).

The overall results of the structural model analysis have been summarised in the following table:

Hypothesis	Path	Coefficient	t-value	Conclusion	R- Square
1	Entrepreneurial Education → Leadership Mindset	0.50	6.39	Significant	0.57
2	Talent Management \rightarrow Leadership Mindset	0.30	5.18	Significant	

Table 3. Structural Model Analysis

Based on Table 3 regarding Structural Model Analysis, the following is the interpretation:

Hypothesis 1: Entrepreneurial Education \rightarrow Leadership Mindset

The effect of Entrepreneurial Education on Leadership Mindset is positive and significant, with a coefficient of 0.50. This means that an increase in Entrepreneurial Education tends to increase Leadership Mindset. The t-value of 6.39 indicates that this effect is statistically significant at a high level of confidence.

Hypothesis 2: Talent Management → Leadership Mindset

The effect of Talent Management on Leadership Mindset is also positive and significant, with a coefficient of 0.30. This indicates that an increase in Talent Management tends to increase Leadership Mindset. The t-value of 5.18 indicates that this effect is also statistically significant.

Coefficient of Determination (\mathbb{R}^2)

Overall, Entrepreneurial Education and Talent Management have a significant influence on Leadership Mindset. The R-Square value of 0.57 indicates that 57% of the variation in Leadership Mindset can be explained by Entrepreneurial Education and Talent Management.

4 Discussion

Bauman & Lucy's (2019) research argues that Entrepreneurial Education can develop competencies for success [50], in line with articles [6], [26] that state students who have the opportunity to participate in Entreprenurial Education are more career-ready. In addition, universities that develop Entreprenurial Education are globally recognised and now act as drivers of regional economic growth [8]. Many students feel that Entreprenurial Education has had a huge impact on their lives, especially in fostering an entrepreneurial mindset [30] and work independence. With this evidence, it is time for universities in various countries to develop the potential of Entreprenurial Education in developing students to have entrepreneurial intentions as is done in China [51], Africa [52] and India as well as Oman [33]. Research in Morocco also revealed that students feel motivated to become entrepreneurs [53] because they are nurtured to develop their potential. The implementation of Entreprenurial Education must be adjusted to the development of the digital era [21], [5] because the whole world will enter the era of mega trends where digital transformation permeates all aspects of life, thus requiring adaptation by the younger generation [32]. In this case, the Entreprenurial Education approach in the Society 5.0 era must indeed be applied intensely in educational institutions, especially universities [54] in order to become a foundation that strengthens prospective college graduates [55] and can reduce the number of unemployed [56], [57].

As early as 2012 Van den Brink & Fruytier [21] came up with the idea of the importance of Talent Management starting from the early junior age of entering the workforce. Another researcher [9] conducted a systematic review of articles published from 1997 to 2020 relating to talent development, specifically how Talent Management is required for improved organisational performance. It is interesting to study further especially related to how (and why) Talent Management should be understood, implemented, and developed [39] so that it can make human resources have better and competitive capabilities [23], [58]. One of the recent studies on Talent Management by Abraham (2023) [17] provides recommendations to educational institutions on how to integrate TM and competency mapping into the curriculum design and syllabus development process.

By focusing on enhancing student leadership mindsets, institutions can bridge the gap between theoretical knowledge and practical application, and adaptability to thrive in diverse and rapidly changing environments. Entrepreneurial Education and Talent Management are indirectly interrelated, this is supported by previous researchers who stated that Entrepreneurial Education and Talent Management can increase competitiveness [23]. In addition, Talent Management in higher education can develop leadership competencies [35], where this competency produces Leadership Mindset which is useful for HR resilience to face challenges in the digital era [43]. Because without a strong foundation, such as Leadership Mindset, many managers fail to manage existing human resources [40]. So it takes a deeply embedded mindset to become entrepreneurial leaders in the present [59], not only as personal development but will have an impact on the sustainability of the global economy [41].

5 Conclusion

The conclusions of this study are (1) Entrepreneurial Education has a significant effect on the Leadership Mindset of students in HEIs Tasikmalaya, and (2) Talent Management has a significant effect on the Leadership Mindset of students in HEIs Tasikmalaya. The suggestions and implications of the results of this study are: Firstly, institutions should consider integrating comprehensive Entrepreneurial Education programs and robust Talent Management strategies into their curricula to foster a proactive and adaptable Leadership Mindset among students. Secondly, policymakers and educational leaders must prioritize the development of innovative approaches that align with the demands of Society 5.0, ensuring that higher education equips students with the necessary entrepreneurial and leadership skills to thrive in an era characterized by rapid technological advancement and societal evolution. Certain constraints within this research include restricted research duration and a limited sample size, necessitating a larger, more diverse sample, particularly involving students from HEIs in West Java or Indonesia, to strengthen research outcomes and validate the proposed theory effectively.

References

- J. Y. Odeesh, "Leadership Talent Management : The Integrated Model," *International Journal of Academic Management Science Research (IJAMSR)*, vol. 5, no. 10, pp. 26–33, 2021, [Online]. Available: https://www.researchgate.net/profile/James-Odeesh/publication/355779082_Leadership_Talent_Management_The_Integrated_Model/links/617d553beef53e51e1094ada/Leadership-Talent-Management-The-Integrated-Model.pdf
- [2] S. S. Gadzali, J. Gazalin, S. Sutrisno, Y. B. Prasetya, and A. M. Almaududi Ausat, "Human Resource Management Strategy in Organisational Digital Transformation," *Jurnal Minfo Polgan*, vol. 12, no. 1, pp. 760–770, 2023, doi: 10.33395/jmp.v12i1.12508.
- [3] J. Zhang and Z. Chen, "Exploring Human Resource Management Digital Transformation in the Digital Age," *Journal of the Knowledge Economy*, no. 29, 2023, doi: 10.1007/s13132-023-01214-y.
- [4] Ms. P. Muthumeena and Dr. G. Yogeswaran, "Entrepreneurship Education Through Successful Entrepreneurial Models in Educational Institutions," *Journal of Development Economics and Management Research Studies*, vol. 09, no. 14, pp. 13– 19, 2022, doi: 10.53422/jdms.2022.91402.
- [5] L. P. Dana, M. Tajpour, A. Salamzadeh, E. Hosseini, and M. Zolfaghari, "The impact of entrepreneurial education on technology-based enterprises development: The mediating role of motivation," *Adm Sci*, vol. 11, no. 4, 2021, doi: 10.3390/admsci11040105.
- [6] M. Guerrero, D. Urbano, and E. Gajón, "Entrepreneurial university ecosystems and graduates' career patterns: do entrepreneurship education programmes and university business incubators matter?," *Journal of Management Development*, vol. 39, no. 5, pp. 753–775, 2020, doi: 10.1108/JMD-10-2019-0439.
- [7] I. Uvarova, I. Mavlutova, and D. Atstaja, "Development of the green entrepreneurial mindset through modern entrepreneurship education," *IOP Conf Ser Earth Environ Sci*, vol. 628, no. 1, 2021, doi: 10.1088/1755-1315/628/1/012034.

- [8] P. T. Gianiodis and W. R. Meek, "Entrepreneurial education for the entrepreneurial university: a stakeholder perspective," *Journal of Technology Transfer*, vol. 45, no. 4, pp. 1167–1195, 2020, doi: 10.1007/s10961-019-09742-z.
- [9] Arif Devi Dwipayana, N. L. Darmayanti, and B. Wijonarko, "Challenges and Opportunities for Leadership and Talent Development Graduates of Cadets," *ADI Journal on Recent Innovation (AJRI)*, vol. 4, no. 2, pp. 122–127, 2022, doi: 10.34306/ajri.v4i2.832.
- [10] Muh. I. Said Ahmad, M. I. Idrus, and S. Rijal, "The Role of Education in Fostering Entrepreneurial Spirit in the Young Generation," *Journal of Contemporary Administration and Management (ADMAN)*, vol. 1, no. 2, pp. 93–100, 2023, doi: 10.61100/adman.v1i2.28.
- [11] J. Sen, A. Harianto, and I. P. Satrianny, "Talent Management in Human Resource Management to Improve Organizational Performance," *Indonesian Journal of Contemporary Multidisciplinary Research*, vol. 2, no. 2, pp. 95–108, 2023, doi: 10.55927/modern.v2i2.3460.
- [12] B. A. Soomro and N. Shah, "Entrepreneurship education, entrepreneurial self-efficacy, need for achievement and entrepreneurial intention among commerce students in Pakistan," *Education and Training*, vol. 64, no. 1, pp. 107–125, 2022, doi: 10.1108/ET-01-2021-0023.
- [13] Y. Wei *et al.*, "Predicting Entrepreneurial Intention of Students: An Extreme Learning Machine with Gaussian Barebone Harris Hawks Optimizer," *IEEE Access*, vol. 8, pp. 76841–76855, 2020, doi: 10.1109/ACCESS.2020.2982796.
- [14] P. Handayati, D. Wulandari, B. E. Soetjipto, A. Wibowo, and B. S. Narmaditya, "Does entrepreneurship education promote vocational students' entrepreneurial mindset?," *Heliyon*, vol. 6, no. 11, p. e05426, 2020, doi: 10.1016/j.heliyon.2020.e05426.
- [15] R. K. Jena, "Measuring the impact of business management Student's attitude towards entrepreneurship education on entrepreneurial intention: A case study," *Comput Human Behav*, vol. 107, no. December 2018, p. 106275, 2020, doi: 10.1016/j.chb.2020.106275.
- [16] G. Secundo, G. Mele, P. Del Vecchio, G. Elia, A. Margherita, and V. Ndou, "Threat or opportunity? A case study of digital-enabled redesign of entrepreneurship education in the COVID-19 emergency," *Technol Forecast Soc Change*, vol. 166, May 2021, doi: 10.1016/j.techfore.2020.120565.
- [17] Z. Ábrahám, D. Szőgyényi, B. Eckert, and S. Németh, "Mapping problem-solving competencies and talent management strategies for universities," *Higher Education*, *Skills and Work-based Learning*, vol. 13, no. 6, pp. 1142–1157, 2023, doi: 10.1108/HESWBL-03-2022-0063.
- [18] M. Mattalatta and Y. Andriani, "Influence of Human Resource Management on Organizational Performance with Talent Management Mediation," *Innovation Business Management and Accounting Journal*, vol. 2, no. 3, pp. 147–156, 2023, doi: 10.56070/ibmaj.v2i3.53.
- [19] M. Kaliannan, D. Darmalinggam, M. Dorasamy, and M. Abraham, "Inclusive talent development as a key talent management approach: A systematic literature review," *Human Resource Management Review*, vol. 33, no. 1, p. 100926, 2023, doi: 10.1016/j.hrmr.2022.100926.
- [20] A. A. Wafi *et al.*, "Talent management amongst graduates: survey instrument development," *Journal of Management Information and Decision Sciences*, vol. 24, no. 6, pp. 1–11, 2022, doi: 10.13140/RG.2.2.32205.72168.

- [21] M. Van den Brink, B. Fruytier, and M. Thunnissen, "Talent management in academia: Performance systems and HRM policies," *Human Resource Management Journal*, vol. 23, no. 2, pp. 180–195, 2013, doi: 10.1111/j.1748-8583.2012.00196.x.
- [22] H. Ghomi and H. Ahmadi, "Assessment of student's talent management in a corporate university," *Management Science Letters*, vol. 8, no. 12, pp. 1375–1386, 2018, doi: 10.5267/j.msl.2018.9.002.
- [23] F. Azma, M. T. Farahbakhsh, R. Safarzad, and E. Farahnaki, "Investigating relationship of talent management and organizational entrepreneurship," *International journal of life sciences & earth sciences*, vol. 2, no. 1, pp. 25–37, 2019, doi: 10.31295/ijle.v2n1.76.
- [24] A. A. Wafi et al., "'You are Hired': Technical and Vocational Education and Training Graduate Employability and Experts' Views," *Pertanika Journal of Social Sciences and Humanities*, vol. 30, no. 2, pp. 859–878, 2022, doi: 10.47836/pjssh.30.2.23.
- [25] N. Baporikar and A. Smith, "Talent Management in Higher Education Institution," *International Journal of Applied Management Sciences and Engineering*, vol. 6, no. 2, pp. 36–57, 2019, doi: 10.4018/ijamse.2019070103.
- [26] S. Rodriguez and H. Lieber, "Relationship Between Entrepreneurship Education, Entrepreneurial Mindset, and Career Readiness in Secondary Students," *Journal of Experiential Education*, vol. 43, no. 3, pp. 277–298, 2020, doi: 10.1177/1053825920919462.
- [27] S. O. Olutuase, P. Brijlal, and B. Yan, "Model for stimulating entrepreneurial skills through entrepreneurship education in an African context," *Journal of Small Business* and Entrepreneurship, vol. 35, no. 2, pp. 263–283, 2023, doi: 10.1080/08276331.2020.1786645.
- [28] R. Kolster, "Diffusional effects of excellence education on the institution as a whole," *European Journal of Higher Education*, vol. 11, no. 1, pp. 82–96, 2021, doi: 10.1080/21568235.2020.1850311.
- [29] M. O'Leary and V. Cui, "Reconceptualising Teaching and learning in higher education: challenging neoliberal narratives of teaching excellence through collaborative observation," *Teaching in Higher Education*, vol. 25, no. 2, pp. 141–156, 2020, doi: 10.1080/13562517.2018.1543262.
- [30] J. Cui, J. Sun, and R. Bell, "The impact of entrepreneurship education on the entrepreneurial mindset of college students in China: The mediating role of inspiration and the role of educational attributes," *International Journal of Management Education*, vol. 19, no. 1, p. 100296, 2021, doi: 10.1016/j.ijme.2019.04.001.
- [31] W. Jiatong, M. Murad, F. Bajun, M. S. Tufail, F. Mirza, and M. Rafiq, "Impact of Entrepreneurial Education, Mindset, and Creativity on Entrepreneurial Intention: Mediating Role of Entrepreneurial Self-Efficacy," *Front Psychol*, vol. 12, no. August, 2021, doi: 10.3389/fpsyg.2021.724440.
- [32] I. W. Othman, S. Mokhtar, A. Tham, and K. Yong, "The Significance of Entrepreneurship Education Literacy in The Era of Digital Transformation: Graduates of The Post-Pandemic Covid-19 Unemployment Crisis," *International Journal of Accounting, Finance and Business*, vol. 6, no. 6, pp. 1–21, 2021, [Online]. Available: www.ijafb.com
- [33] I. Anwar, P. Thoudam, and I. Saleem, "Role of entrepreneurial education in shaping entrepreneurial intention among university students: Testing the hypotheses using mediation and moderation approach," *Journal of Education for Business*, vol. 97, no. 1, pp. 8–20, 2022, doi: 10.1080/08832323.2021.1883502.

- [34] Q. Yang, J. Chen, L. Yang, and Z. Liu, "How to Develop Entrepreneurial Talent More Effectively? A Comparison of Different Entrepreneurship Educational Methods," *Front Psychol*, vol. 12, no. April, pp. 1–14, 2021, doi: 10.3389/fpsyg.2021.644113.
- [35] I. R. Mohamed Jais, N. Yahaya, and E. K. Ghani, "Talent management in higher education institutions: Developing leadership competencies," *J Educ Elearn Res*, vol. 8, no. 1, pp. 8–15, 2021, doi: 10.20448/JOURNAL.509.2021.81.8.15.
- [36] A. In'am and K. Wafiroh, "Management of entrepreneurship education in developing the interests and talents of santri at Miftahul Mubtadiin Ar-Ridlo Krempyang Tanjunganom Nganjuk Islamic Boarding School in 2021-2022," *Indonesian Journal of Entrepreneurship & Startups (IJES)*, vol. 1, no. 1, pp. 57–70, 2023, [Online]. Available: https://journal.formosapublisher.org/index.php/ijes/article/view/2926
- [37] A. A. Wafi *et al.*, "'Turning Job Seekers to Job Creators': Talent Management Module Development for TVET Graduates," *Journal of Technical Education and Training*, vol. 15, no. 1, pp. 102–115, 2023, doi: 10.30880/jtet.2023.15.01.010.
- [38] F. Y. H. Kola, A. Aliesmaeili, and V. Fallah, "Identifying the Dimensions, Components, and Indicators of Talent Management," *Iranian journal of educational Sociology*, vol. 4, no. 1, pp. 29–36, 2019.
- [39] E. Gallardo-Gallardo, M. Thunnissen, and H. Scullion, "Talent management: context matters," *International Journal of Human Resource Management*, vol. 31, no. 4, pp. 457–473, 2020, doi: 10.1080/09585192.2019.1642645.
- [40] B. Crane, "Leadership mindsets: Why new managers fail and what to do about it," *Bus Horiz*, vol. 65, no. 4, pp. 447–455, 2022, doi: 10.1016/j.bushor.2021.05.005.
- [41] I. Rimanoczy and B. Klingenberg, "The Sustainability Mindset Indicator: A Personal Development Tool," *Journal of Management for Global Sustainability*, vol. 9, no. 1, pp. 43–79, 2021, doi: 10.13185/jm2021.09103.
- [42] F. A. Farida, Y. B. Hermanto, A. L. Paulus, and H. T. Leylasari, "Strategic Entrepreneurship Mindset, Strategic Entrepreneurship Leadership, and Entrepreneurial Value Creation of SMEs in East Java, Indonesia: A Strategic Entrepreneurship Perspective," *Sustainability (Switzerland)*, vol. 14, no. 16, 2022, doi: 10.3390/su141610321.
- [43] L. Duman, "AURA Antioch University Repository and Archive Developing a Resilience-Thinking Leadership Mindset Scale Developing a Resilience-Thinking Leadership Mindset Scale," 2018.
- [44] M. Tavanti and E. Wilp, "The Common Good Mindset: An Integrated Model for Sustainability and Leadership Management Education," ... Mindset and Transformative Leadership, 2021, [Online]. Available: http://www.marcotavanti.com/uploads/9/9/2/1/9921626/author_copy_tavantiwilp_common_good_mindset.pdf
- [45] S. Mawson, L. Casulli, and E. L. Simmons, "A Competence Development Approach for Entrepreneurial Mindset in Entrepreneurship Education," *Entrepreneurship Education and Pedagogy*, vol. 6, no. 3, pp. 481–501, 2023, doi: 10.1177/25151274221143146.
- [46] J. Yan, T. Huang, and Y. Xiao, "Assessing the impact of entrepreneurial education activity on entrepreneurial intention and behavior: role of behavioral entrepreneurial mindset," *Environmental Science and Pollution Research*, vol. 30, no. 10, pp. 26292– 26307, 2023, doi: 10.1007/s11356-022-23878-w.

- [47] F. Salvetti and B. Bertagni, "Leadership 5 . 0 : An Agile Mindset for a Digital Future The Vision Behind the Program, Its Architecture and Main Pillars," *iJAC*, vol. 13, no. 2, pp. 57–67, 2020.
- [48] R. Al Aina and T. Atan, "The impact of implementing talent management practices on sustainable organizational performance," *Sustainability (Switzerland)*, vol. 12, no. 20, pp. 1–21, 2020, doi: 10.3390/su12208372.
- [49] N. Kangas, K. Kumar, B. Moore, C. Flickinger, and J. Barnett, "Development of a Leadership Mindset Scale," *The Journal of Leadership Education*, vol. 22, no. 1, 2023, doi: 10.12806/v22/i1/r5.
- [50] A. Bauman and C. Lucy, "Enhancing entrepreneurial education: Developing competencies for success," *International Journal of Management Education*, vol. 19, no. 1, p. 100293, 2019, doi: 10.1016/j.ijme.2019.03.005.
- [51] H. A. Bazkiaei, L. H. Heng, N. U. Khan, R. B. A. Saufi, and R. S. R. Kasim, "Do entrepreneurial education and big-five personality traits predict entrepreneurial intention among universities students?," *Cogent Business and Management*, vol. 7, no. 1, 2020, doi: 10.1080/23311975.2020.1801217.
- [52] S. T. Mahlaole and M. J. Malebana, "The effects of entrepreneurship education on students' entrepreneurial intentions at a South African University of technology," *Social* and Commercial Entrepreneurship 1 Citation Information, vol. 24, no. 2, p. 24, 2021.
- [53] A. Hassi, "Effectiveness of early entrepreneurship education at the primary school level: Evidence from a field research in Morocco," *Citizenship, Social and Economics Education*, vol. 15, no. 2, pp. 83–103, 2016, doi: 10.1177/2047173416650448.
- [54] X. H. Wang, X. You, H. P. Wang, B. Wang, W. Y. Lai, and N. Su, "The Effect of Entrepreneurship Education on Entrepreneurial Intention: Mediation of Entrepreneurial Self-Efficacy and Moderating Model of Psychological Capital," *Sustainability* (*Switzerland*), vol. 15, no. 3, 2023, doi: 10.3390/su15032562.
- [55] O. Saoula, A. Shamim, M. J. Ahmad, and M. F. Abid, "Do entrepreneurial self-efficacy, entrepreneurial motivation, and family support enhance entrepreneurial intention? The mediating role of entrepreneurial education," *Asia Pacific Journal of Innovation and Entrepreneurship*, vol. 17, no. 1, pp. 20–45, 2023, doi: 10.1108/apjie-06-2022-0055.
- [56] M. F. Husein and S. Hariyono, "Application of technology based on the industrial revolution 4.0 for business strategies in various sectors: a literature review," 2022.
- [57] T. Kasradze and E. Gulua, "Challenges and Opportunities for Teaching Practical Skills at Higher Education Institutions under the conditions of COVID-19 Pandemic," *European Journal of Social Science Education and Research*, vol. 8, no. 1, pp. 63–78, 2021.
- [58] F. Kravariti and K. Johnston, "Talent management: a critical literature review and research agenda for public sector human resource management," *Public Management Review*, vol. 22, no. 1, pp. 75–95, 2020, doi: 10.1080/14719037.2019.1638439.
- [59] R. Subramaniam and R. K. Shankar, "Three Mindsets of Entrepreneurial Leaders," *Journal of Entrepreneurship*, vol. 29, no. 1, pp. 7–37, 2020, doi: 10.1177/0971355719893498.