

# ENTREPRENEURSHIP EDUCATION FOR HUMAN RESOURCE DEVELOPMENT: STUDY BIBLIOMETRIC

Nanis Hairunisya<sup>1</sup>, Sulastrri Rini Rindrayani<sup>2</sup>, Fajar Supanto<sup>3</sup>, Syaiful Arifin<sup>3</sup>

<sup>1</sup>Department of Manajemen, Indocakti College of Economics, East Java, Indonesia

<sup>2</sup>Bhineka PGRI University, Tulungagung, East Java, Indonesia

<sup>3</sup>Merdeka University, Malang – East Java, Indonesia

## ABSTRACT

*The human resource development strategy involves higher education. In this manner, the business course plans to furnish understudies with the abilities required in the realm of work.. However, the success of entrepreneurship education (EE) still cannot meet the expectations of human resource departments in several companies. Student skills only match the needs of SMEs. Through bibliometric analysis, this study seeks to ascertain future research directions on the relationship between (EE) and human resource development (HRD) for improvement. Using "Publish and Perish" and "Mendeley web importer" Publishing trends peaked in 2017 and 2021 with 42 articles. The first rank is occupied by Sustainability (Switzerland) Journal with a total of 31 articles. The quote pattern shows an up-and-down pattern. there are 4 clusters. Clusters 1 and 2 each have 7 items. Clusters 3 & 4 each have 2 items. author collaboration with a minimum number of occurrences of two documents, resulting in 8 authors who are connected consistently. The implication is that the implementation of EE must be reorganized starting from input, process to output in order to meet HR needs. for further research this study suggests new indicators for EE and HRD variables.*

## KEYWORDS

*Entrepreneur Education, Entrepreneur Training, Human Resources Development, Human Resources Training*

## 1. INTRODUCTION

The goals of the Sustainable Development Goals (SDGs), 2015 to 2030 focus on rethinking processes and mechanisms to achieve quality education to ensure inclusive, equitable and quality education and promote lifelong learning opportunities [1]. This goal puts an accentuation on extending the quantity of youth and grown-ups who have the right stuff required for admittance to business, good work prospects, business venture, and to guaranteeing that everybody acquires the information and abilities to help feasible turn of events. [2].

To assure the education of people with entrepreneurial aptitude to create human resources that assist in accomplishing these objectives is a problem for educational institutions. In order to help students become entrepreneurs in a variety of professions, higher education has established entrepreneurship education as part of its policy. Future challenges for higher education include the requirement for the development of human resources..[3][4][5][6][7].

Human resource development requires continuous training and creative and innovative management from the company. Human resource management plays an important role in managerial decision making that affects organizational entrepreneurship, therefore, re-examining the relationship between human resources and entrepreneurship education becomes a necessity

[8]. Every person, family, and social society can be developed in a positive and long-lasting way thanks to human capital. The strongest foundation for sustainable growth is investing strategically, and that includes investing in people. In this way, it has been and keeps on being an exceptionally basic mission to foster HR.

The importance of training and education for human resource development was also conveyed [9][10][11][12][13]. Entrepreneurship education for HR development is correlated with sustainable development. Human resources' support and promotion of innovation in training and education. gives an international framework for the types, methods, and reach of education for sustainable development. The fast expansion in the information based modern area has prompted expanded rivalry for scant assets, particularly information and human resources. [14].

Entrepreneurship education is widely recognized as an effective tool for socio-economic development of people in developing countries. Entrepreneurial Education Development supports policy focus and resource procurement..[15]. Several nations in Europe have implemented policies that are absolutely necessary for all citizens to acquire transversal skills, including: computerized abilities, learning systems for learning, a feeling of drive and business venture, and social mindfulness..[16]. But it has not been done in developing countries.

Preparing in business venture empowers understudies to get a handle on various parts of the economy and society, as well as the cycles basic their development. It is vital to conduct more creative actions in order to explore both new and existing knowledge. This requires being adaptable in the face of unforeseen circumstances and using the necessary knowledge for a variety of tasks. Intrinsic motivation is provided to participants throughout training in order to help them learn new approaches and approaches to problem-solving..[17].

To promote the development of entrepreneurial intentions and the formation of human capital, universities should pay more attention to practice-oriented entrepreneurship training and courses, as well as related activities for both students and entrepreneurs.[18].

Entrepreneurship may hold the key to long-term socio-economic empowerment in the face of global instability, social inequality, and (young) unemployment. However, this is challenging to do without education that equitably targets all social strata and employs the correct tools, techniques, and goals. Studying the real trends in publications and the points where different ideas cross with regard to the advancement of human resource management and entrepreneurship education is quite intriguing. As a result, the following statement of the problem served as the foundation for this research.

Q1: What are the patterns in the distribution of articles on Business Schooling and Human Asset Advancement and Preparing 2013-2022?. Q2: From 2013 to 2022, which journal has published the most articles on entrepreneurship education, human resource training, and development?Q3: What is the citation pattern for HR Entrepreneurship Training & Development articles 2013-2022?Q4: What are the trends in the author's keywords in the 2013-2022 HR training & development entrepreneurship education articles?Q5: What is the collaboration of the authors on the 2013-2022 HR training & development entrepreneurship education article?

## **2. LITERATURE REVIEW**

### **2.1. Entrepreneurship Education**

How to choose a problem by filtering information and coming up with new ideas in the workplace is a very important task for educational institutions to complete in order to improve students' skills and creativity. It refers to the student entrepreneurship training process and the creation of an entrepreneurial culture. Either education or business may be used to promote entrepreneurship. [19] Students are trained using pertinent models that enable them to develop their talents.[20]. Learning about entrepreneurship is crucial for students to build their skills. [21][22] [23] It enables them to participate in society and provide more ideal circumstances in a world that is increasingly competitive. [24].

Entrepreneurship has always been linked to the creation of financial and commercial capital. People can use their reasoning, holistic thinking, and creative and innovative thinking to lead others [25].. People have the chance to identify, assess, and seize their chances for innovation and entrepreneurship [26][27]. Furthermore, business venture fills in as an impetus for change in various settings, including the political, business, and social, as well as the instructive [28][29][30][31].

Entrepreneurial competence is the ability to carry out and follow through on what is planned, which includes the ability to develop ideas and put knowledge and skills into practice, identify issues, find solutions, set realistic goals, exercise initiative, take responsibility for outcomes, be adaptable to change, and take reasonable risks. [32].

The essential abilities of a business visionary remember imagination for critical thinking, development in quickly taking advantage of chances to change ideas into new items with new dangerous qualities, and trust in pursuing the best choices.[32].[33][34]

Skill based preparing alludes to emotional exercises in which an individual deliberately makes a move, pursues decisions in light of their current circumstance, applies the information, capacities, and mentalities expected to complete an errand, and enhances the organization. From an insightful outlook, skill based preparing is significant for individual development in friendly, corporate, and government settings.[35][33] [36] [37]. [38]

Higher education institutions must prepare academic staff and students to be trained in a knowledge-oriented environment and collaboration with industry agents for career development [39][40]. Schools and communities are interrelated, and as a result, cooperation among multiple agents must be carried out while employing the most effective methods to achieve shared objectives..[41]. Having entrepreneurial competence must be part of the profile of all leaders who provide education..[42]

School management must be able to manage entrepreneurship education in an innovative way from an academic, social and economic perspective to change traditional teaching practices and create new procedures, resources, services and knowledge that contribute to a thorough entrepreneurial training process that makes a positive contribution to sustainability. Entrepreneurial competencies that educators must possess are Leadership, entrepreneurship, emotional intelligence, customer and result orientation, strategic management, negotiations and relationships, teamwork, tactical management, interpersonal relations, empowerment, and a focus on continuous improvement. [41]. By assessing context, input, process, and product (CIPP model) can be used to evaluate the implementation of entrepreneurship education. [43][44][45]

## 2.2. Training and Development of Human Resources

The understanding of human resources develops through a scientific field that is familiarly called human resource management [46]. The human resource function, in particular recruiting, training and development, performance evaluation, and organizational composition, shows how the HR function works in conjunction with HR strategy to meet corporate objectives..[47].

Preparing and advancement is one of the administration capabilities to further develop HR abilities with the goal that they are more useful and make positive changes for HR which are authoritative patterns to further develop execution.[48]. Preparing is a technique used to do human asset improvement connected with the capacities or abilities of representatives who have involved a specific position or occupation inside an association. Training is usually intended for new employees to gain the skills needed. company. Development: Old employees to develop the skills they have. A firm has to be backed by human resources that are competent and trustworthy if it is to continue to grow.[49].

Training is an effort to increase HR capabilities in a relatively short period of time, while development is an effort to increase HR competence in preparation for developing higher responsibilities in the future. Consequently, human resources in businesses must pay attention to their requirements in order to improve their competencies through education and development.[50].

Since virtually every human being may be "honed," "trained," and "developed," HR Training & Development is crucial to enhancing the quality of human resources. [51]. A number of objective, multifaceted, and complicated elements have an impact on the function that education and training play in the development of human resources. To have an objective and thorough assessment of HR training and development difficulties, an analysis of HR education and training must continue to be conducted. [52]. Capability Based Human Asset Advancement means to work with the acknowledgment of authoritative objectives.[53]. [54].

For a firm to expand and be effective in facing competition and a dynamic environment, employee training and development is crucial..[55]. Therefore, increasing funds for employee training and development can be prioritized in human resource training programs. [56]. Investing in training and human resource development positively influences employee commitment to the organization and increases employee satisfaction [57][58]. HR leaders who are not professional in managing HR training and development are one of the factors so that appropriate policies and procedures can be developed for effective HR management [59].Policy evaluation directed at human resources, looking for uniformity and possibility to carry out the required activities. [60]. Human resource development (HRD) is required to play a distributed and integrated function in a variety of leadership and supervisory responsibilitiesDifferent partners, both inside and outside to the firm, may share liability regarding learning and advancement.[61] A new "component of progress" for hierarchical flexibility is HRD's ability to impact authoritative practice essentially. [62]. Higher education institutions must develop ideas to expand training possibilities and human resource development because of this. [63].

Human resource development (HR) mostly focuses on improving performance with a holistic approach by emphasizing humanistic perspectives, for instance, "meaningful work," "meaning of work," "workplace spirituality," "work values," and "work as a calling." [64]. [65]. Human resource development (HR) needs to include a continuous learning process by evaluating HRD practices and reconfiguring, through action learning in leadership development programs. What leadership skills are required before, during, and after a crisis? What obligations do human resource development professionals have to their organizations? [66].

This program encourages lifelong learning and offers the chance to convert concepts into actions that affect the sustainability of a business.[67]. HRD concepts and theories that are in line with digital pedagogical principles and models, as well as digital learning (pedagogy) techniques that take into consideration significant pedagogical qualities to assist swift pedagogical changes. [68]. Assessing training needs, establishing organizational training goals, creating a training action plan, and implementing training initiatives are the phases for HR training and development. (5) Evaluation and revision of the training. "On the job training," "guidance," and "apprenticeship" are among the top nine approaches and strategies for training and human resource development. (3) instructor-led classroom training; (4) front room/simulator training; (5) web-based learning; (6) instructor-led classroom training; (7) programmed self-instruction; (8) case studies/role games; and (9) "systematic job rotation and transfer" [69] [70]

### **3. METHODOLOGY**

#### **3.1. Research Design**

This work employs a systematic and explicit mapping strategy with a bibliographic study design [71] [72][73][74].According to Julia et al. (2020b) and Julia et al. (2020a), the four steps of the literature review process are as follows: (1) search techniques, (2) filter bibliography, (3) full bibliography, and (4) bibliometric analysis.

The components of entrepreneurial competence, the issues on which scholars have focused, the theoretical components, and the methodology will all be examined in this study. (1) Use the Publish and Perish tool to look for articles in the most pertinent Scopus and Mendeley online importer databases. This is the first stage of the 4-stage systematic mapping process. Articles are categorized for bibliometric analysis, their metadata is examined and completed, and then a bibliometric analysis is carried out using the VOSviewer program.

#### **3.2. Data Collection**

Mendeley Web Importer (MWI) was used to search for references in order to collect data between 2013 and 2022, with the accompanying standards: (1) Most relevant; (2) Journals; (3) the title of the article should contain the words "entrepreneurship education for human resource development"; (4) English. An initial search on the Mendeley web importer yielded 713 scientific papers.

To enrich literature and as a comparison material, this study also uses library sources from Publish or Perish between 2013-2022 with the following criteria: (1) Scopus; (2) Journals; (3) the keyword "entrepreneurship education for human resource development"; (4) English. One of the biggest information bases for peer-surveyed writing, the bibliographical pursuit utilizes PoP applications. [75][76][77]. There is a bibliographic search every year until September 2022 since the Scopus database via PoP can only hold 200 articles at a time. As initial data, the search turned up 306 articles.

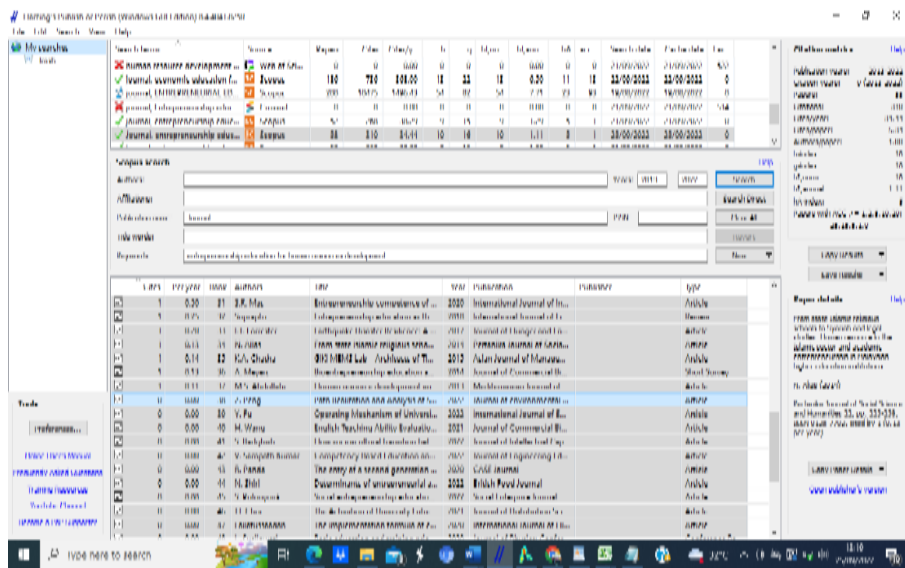


Figure 1 : Source of data search from Publish or Perish

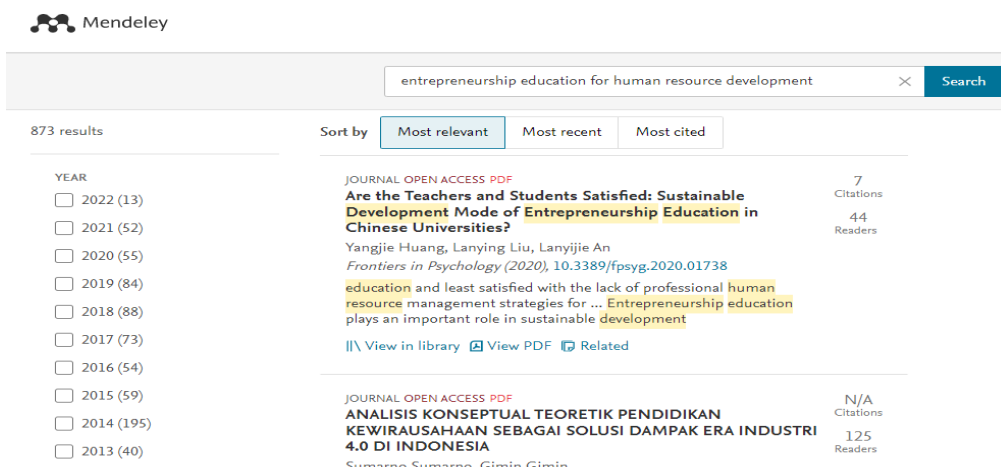


Figure. 2. Source of data search from Mendeley Web Importer

### 3.3. Bibliographic Filters

The bibliography is chosen and arranged according to a number of criteria, including the following: (1) covers the context of "entrepreneurship education for human resource development"; (2) use English; and (3) issued by a renowned or established publisher of bibliographic databases. Every bibliography that will be included or disregarded in the bibliometric analysis procedure is examined by tracing it via a database of recognized international journals. The data is taken from the PoP and Mendeley Reference Manager (MRM) programs and saved in CSV format. Because they were published as book chapters, books, editorial reviews, or conference articles and did not have abstracts, some PoP and MWI were not chosen.

### 3.4. Data Analysis

Based on initial data from the selected articles, namely 713 from MWI and 306 from PoP, the articles were selected one by one based on the keywords entrepreneurship education, human

resource development. The next analysis is to analyze the abstract of the article. At this stage, 263 articles were found, 58 from PoP and 205 from MWI

#### 4. FINDINGS/RESULTS

Search results through PoP and MWI, the number of articles found is presented in table 1

Table 1. The Total Number of Papers Published Each Year, Inclusively and Exclusively.

Year	Inclusive	Exclusive	Total
2013	15	28	43
2014	27	51	78
2015	39	23	62
2016	34	22	56
2017	42	38	80
2018	12	43	54
2019	22	53	75
2020	12	52	64
2021	42	15	57
2022	18	3	21

##### 4.1. Analysis of Publication Trends

Trends in journal articles published with the keywords entrepreneurship education for human resource development from 2013-2022 are depicted in Figure 3.

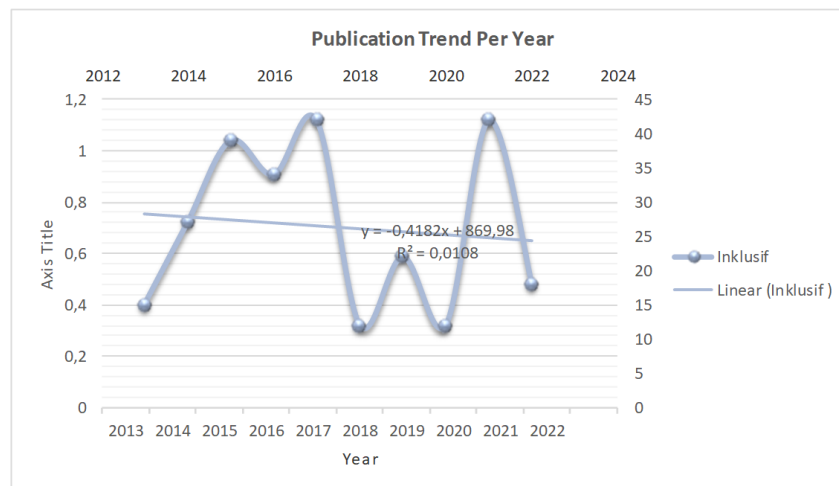


Figure. 3. Trend of Article Publication Each Year

Figure 3 displays the publishing trend for the area of entrepreneurship education for human resource development, which reached a high in 2017 and 2021, each with 42 articles that met the requirements. The lowest publications occurred in 2018 and 2020, namely 12 articles. There are still very few articles that specifically look for a direct link between entrepreneurship education and human resource development.

## 4.2. Journal-based Analysis

The top 10 journals with the most papers published on the subject of entrepreneurship education for human resource development are shown in Table 2. Sustainability (Switzerland) Journal holds the top spot with a total of 31 articles published. The Mediterranean Journal of Social Sciences, with a total of 4 articles, is in second place. International Journal of Entrepreneurial Behavior and Research, Journal of Entrepreneurship Education, Journal of Security and Sustainability Issues, International Journal of Advanced Science and Technology, International Journal of Applied Business and Economic Research, International Journal of Higher Education, and Journal of Entrepreneurship Education, published two articles, take the third through tenth positions, respectively.

Table 2 . The Most Popular "Entrepreneurship Education For Human Resource Development" Journal

No	Journal Name	Number Of Article	Publisher
1	Sustainability (Switzerland)	31	MDPI
2	Mediterranean Journal of Social Sciences	4	MCSER-Mediterranean Center of Social and Educational Research
3	International Journal of Entrepreneurial Behaviour and Research	2	Emerald publishing
4	Journal of Entrepreneurship Education	2	TechniumScience
5	Journal of Security and Sustainability Issues	2	<u>The General Jonas Žemaitis Military Academy of Lithuania</u>
6	International Journal of Advanced Science and Technology	2	IOSR Journals
7	International Journal of Applied Business and Economic Research	2	Serial Publications Pvt. Ltd
8	<u>International Journal of Entrepreneurial Behavior &amp; Research</u>	2	Emerald publishing
9	INTERNATIONAL JOURNAL OF HIGHER EDUCATION	2	<b>Sciedu Press</b>
10	JOURNAL OF ENTREPRENEURSHIP EDUCATION	2	Iiste.org

## 4.3. Citation Amount-based Analysis (Citations Rates per Year)

The number of articles citing "entrepreneurship education for human resource development" is shown in Table 3 and Figure 3. An ascending-descending - ascending-descending pattern can be seen in the quotation pattern. Increases were seen from 2013 to 2014 and from 2016 to 2018. The tendency of decrease, meanwhile, was evident from 2014 to 2016 and from 2018 to 2022. With 117 citations in total from 31 publications, 2014 saw the most citations.



Table 3 : Inversely correlated with the quantity of papers published is the amount of citations.

Year	Number Of Citation	Number of article
2013	21	15
2014	117	27
2015	79	39
2016	29	34
2017	85	42
2018	94	12
2019	73	22
2020	61	12
2021	32	42
2022	2	18

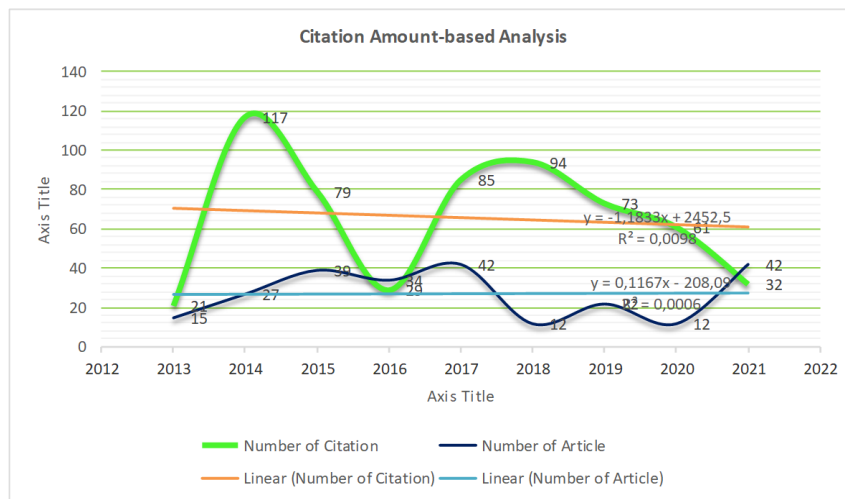


Figure 4 : The number of citations is inversely proportional to the number of published articles

Figure 3 above shows that there were 15 articles published in 2013, but they were cited 21 times. The increase in citations occurred in 2014, although there were only 27 published articles, the number of citations has become 117 citations. This means that even though the number of articles is still small, they can influence other writers. Moreover, beginning around 2018, the quantity of articles referred to has been 94 despite the fact that the quantity of articles distributed has just been 12 articles. This indicates that in 2018 the topic of entrepreneurship education for human resource development really influenced or inspired other researchers. .

#### 4.4. Top Ten Most Cited Articles

The top 10 papers on entrepreneurship education for human resource development that have received the most citations are shown in Table 4. The majority of the initial citations come from Joan DeJaeghere and Aryn Baxter's publications. published in 2014 with 154 citations, with a large number of citations above 10 and below 100 in the second to tenth orders. .

Table 4 : Top Ten Articles with the Most Citations

No	Author(s)	Article Title	Year of Publication	Number of Citation	Journal Name
1	Joan DeJaeghere Aryn Baxter	<u>Entrepreneurship education for youth in sub-Saharan Africa: A capabilities approach as an alternative framework to neoliberalism's individualizing risks</u>	2014	154	Progress in Development Studies
2	Lubna Rashid	Entrepreneurship Education and Sustainable Development Goals: A literature Review and a Closer Look at Fragile States and Technology-Enabled Approaches	2019	77	Sustainability
3	Rae, D.	Entrepreneurial learning: peripherality and connectedness	2017	69	International Journal of Entrepreneurial Behaviour and Research
4	Alžbeta Kucharčíková Martin Mičiak Miloš Hitka	EVALUATING THE EFFECTIVENESS OF INVESTMENT IN HUMAN CAPITAL IN E-BUSINESS ENTERPRISE IN THE CONTEXT OF SUSTAINABILITY	2018	60	Sustainability (Switzerland)
5	Harris, S.P.	Accessing social entrepreneurship: Perspectives of people with disabilities and key stakeholders	2013	60	Journal of Vocational Rehabilitation
6	Audretsch, D.	Academic policy and entrepreneurship: a European perspective	2014	44	Journal of Technology Transfer
7	Galvão, A.	The role of entrepreneurship education and training programmes in advancing entrepreneurial skills and new ventures	2020	42	European Journal of Training and Development
8	Errasti, N.	Factors and maturity level of entrepreneurial universities in Spain	2018	30	International Journal of Innovation Science
9	Schmitt, U.	Supporting the Sustainable Growth of SMEs with Content	2018	28	Journal of Entrepreneurship and Innovation in Emerging Economies
10	Franciska von Heland, et all	<u>Improving stewardship of marine resources: Linking strateg to opportunity</u>	2014	18	Sustainability (Switzerland)

#### 4.5. Author Keyword-Based Analysis

The VOSviewer program was used to do author keyword analysis. Figure 3 shows the 149 keywords the author used, examined with a minimum of ten occurrences, and the 35 keywords that have the strongest relationships between the writers. Out of these 35 keywords, 60% were determined to be pertinent, resulting in the analysis of 21 keywords. There are 4 clusters present. Entrepreneurship activity, entrepreneurial culture, entrepreneurial education, entrepreneurial goal, entrepreneurship course, entrepreneurship education, and university student make up the first of the cluster's seven topics. Higher education, human resources, human resources development, human resources management, human resources development, sustainable development, and vocational education make up Cluster 2's seven topics. Future research and the entrepreneurial ecosystem make up Cluster 3's two topics. Practical ecosystem and research constraints make up Cluster 4.

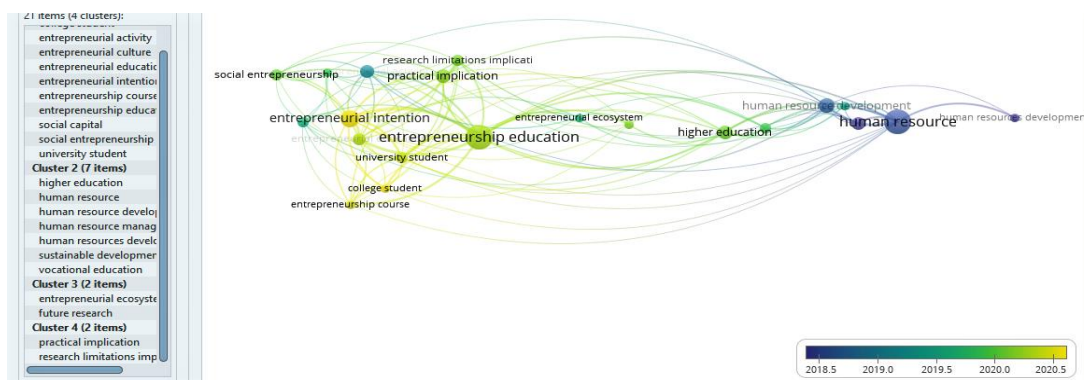
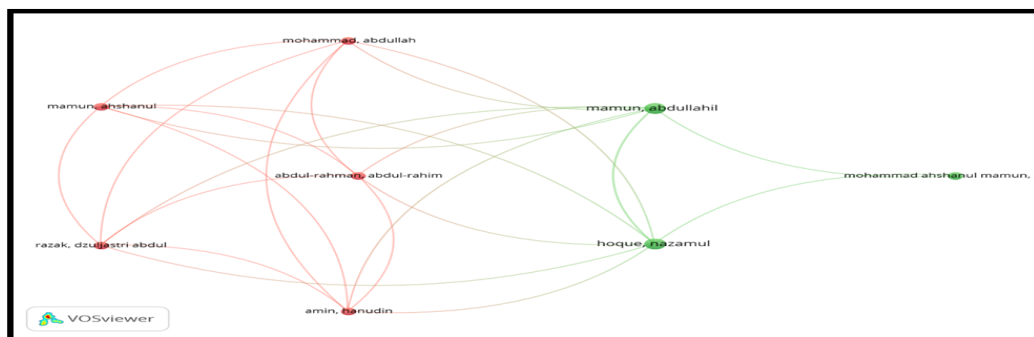


Figure 5: Visualization of Author Keyword Network

Based on Figure 4, it shows that the higher education variable has a strategic position and is a crossroads in the implementation of entrepreneurship education for human resource development.

#### 4.6. Author Collaboration-Based Analysis

The investigation of author cooperation using VOS Viewer, with a minimum of two documents appearing, yields 8 writers who are regularly related out of 557 authors. Each author has one document and 25 links. The author cooperation results in two clusters, red cluster 1 with five writers and green cluster 2 with three authors, as shown in figure 6.



Figur 6: Author Collaboration Network Visualization.

## 5. DISCUSSION

The publishing trend on the subject of entrepreneurship education for human resource development peaked in 2017 and 2021, with 21 articles each meeting the criteria, throughout the course of the previous 10 years. The two years with the fewest publications were 2018 and 2020. Sustainability (Switzerland) was the journal that made a significant contribution to the publication of the theme of entrepreneurship education and human resource development. This is consistent with the topic's main focus, which is sustainability.

Hardly any papers explicitly inspect the connection between business instruction and the improvement of HR. The majority of authors address human resource development and entrepreneurial education separately. This recommends that there are still a lot of opportunities for the following creator to lay out a reasonable association between business venture schooling and human asset improvement. There are no articles that specifically look at how entrepreneurship education affects a company's development of its people resources. There are several theoretical research opportunities that can be employed as research variables in the future. Based on the vos viewer image, there are still many variables that can mediate between one variable and another. Such as human capital variables can be a mediation for human resources management with entrepreneur education.

A few examples of themes that might change include the development of economics, entrepreneurial endeavor, entrepreneurial growth, entrepreneurial culture, entrepreneurial education, entrepreneurial goal, entrepreneurship course, and university students. advanced education, institutional instruction, human resources, human asset improvement, human asset the board, social capital, innovative schooling, pioneering expectation, enterprising abilities, and innovative training. biological system for business. a helpful climate. .

This study has several theoretical contributions and implications, this is one of the analyzes of entrepreneurship education carried out in tertiary institutions, namely about entrepreneurial character, mindset and creative and innovative behavior that can be used for all professions and for the development of HRD in companies [78].

This study helps the company's HR department by fostering entrepreneurial competence, which is the ability to carry out and follow through on plans, come up with original ideas, apply knowledge and skills, identify issues, come up with solutions, and establish goals. take charge, be accountable for your actions, be adaptable to change, and take calculated chances. [32].[33][34]. This review's work also contributes to competency-based training approaches, which relate to subjective activities that are deliberately involved in actions, making judgments in response to current conditions [35][33], bringing personal value to the organization [36] [37] for individual growth in social, business, and government situations. [38]. Young individuals gain organizational skills, such as time management, leadership development, and interpersonal skills, via entrepreneurship education. [79].The Theory of Entrepreneurship Competency (M-TEC) paradigm has been empirically evaluated. There are nine different types of competences, which are divided into four categories: entrepreneurship, management and business, human resources, and interpersonal abilities

It should be considered for future research on the issue of entrepreneurial training for human resource development, with human capital as a moderating variable, and it may be incorporated to the concept of sustainable development.[80][81].

The theoretical foundation for learning entrepreneurship provides fresh perspectives, new ideas, and chances that might together produce new value..Students' entrepreneurial attitudes and

intents can be influenced by entrepreneurship education with successful entrepreneurial role models (Jena, 2020) and this might result in a greater orientation of students' perceptions of the social advantages of entrepreneurship (new employment) compared to finance (high income). while taking into consideration modifications in innovation and advancements in technology. On a global scale . It is anticipated that entrepreneurship education will reduce young unemployment. resolving social issues, facilitating the conversion of resources and talents into opportunities and means of subsistence and maintaining environmental sustainability.

Access to education, education quality, synergies between government, industry, and higher education, industrial connections, and incentive system are the five areas that the Indonesian education policy framework focuses on in order to improve human resources and increase the country's competitiveness. In the mean time, the Coronavirus pandemic's disturbance drove the Indonesian schooling system to advance its training techniques to adapt to the plague and its repercussions.[82].. As a result of the coronavirus, possibilities have arisen for entrepreneurial instructors to apply their knowledge to discover fresh methods that will help create a more contextual learning environment. [83]. The discoveries of this writing survey prompted the foundation of the accompanying calculated system for contemplating how business schooling and human asset improvement are connected.

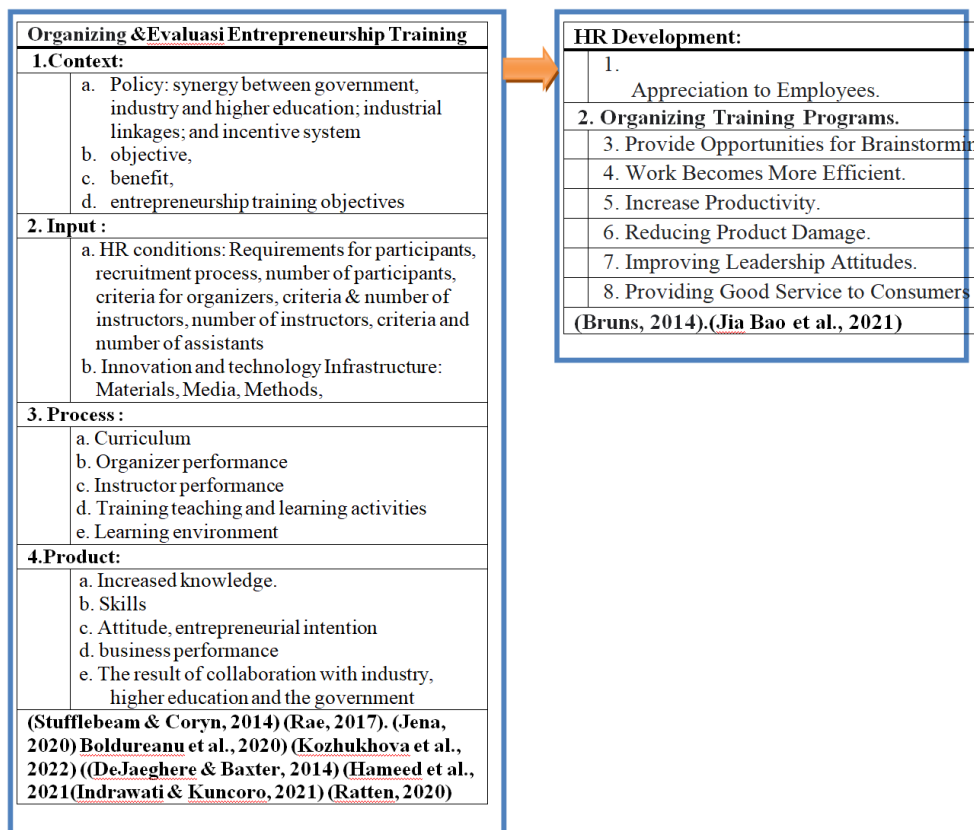


Figure 7 : HR Development And Entrepreneurship Learning Indicators Provide New Perspectives

## 6. CONCLUSIONS

Several variables that can mediate the topic of entrepreneurship education on human resource development have been found. Variables that are still little researched as mediation are human capital, social capital and ecosystems for entrepreneurship.

This study has theoretical contributions and implications, related to entrepreneurship education carried out in tertiary institutions, namely about entrepreneurial character, mindset and creative and innovative behavior that can be used for all professions and for the development of human resources in companies.

This study assists the HR department of companies with cultivating entrepreneurial competencies, namely the ability to execute and follow through on plans, generate original ideas, apply knowledge and skills, identify problems, generate solutions, and set goals, take responsibility, adapt to change, and seize calculated opportunities. .

This survey likewise adds to a capability based preparing approach, and the discoveries from this writing audit lead to the foundation of a calculated system, especially for HR preparing markers going from information, interaction and result, and further to ponder how business schooling and human asset improvement relate.

This study suggests a few markers that can be utilized for additional examination connected with the act of business schooling in tertiary organizations and the execution of human asset preparing in organizations, particularly on info, cycle and result. Moreover, it is important to increment participation between advanced education establishments and organizations connected with human asset preparing for better human asset improvement

The restriction of this study is that the quest for articles really depends on 2022. For data analysis, other methods can be used for bibliometric studies. Likewise, data search programs can use programs other than PoP and Mendeley Web Importer

## ACKNOWLEDGEMENTS

The author thanks the lab staff, who have helped collect library materials

## REFERENCES

- [1] V. Kioupi and N. Voulvoulis, "Education for Sustainable Development: A Systemic Framework for Connecting the SDGs to Educational Outcomes," *Sustainability*, vol. 11, no. 21, p. 6104, Nov. 2019, doi: 10.3390/su11216104.
- [2] J. Coenen, L. M. Glass, and L. Sanderink, "Two degrees and the SDGs: a network analysis of the interlinkages between transnational climate actions and the Sustainable Development Goals," *Sustain. Sci.*, 2022, doi: 10.1007/s11625-021-01007-9.
- [3] E. Bombiak, "Green human resource management- the latest trend or strategic necessity?," *Entrep. Sustain. Issues*, 2019, doi: 10.9770/jesi.2019.6.4(7).
- [4] L. Tomčíková, N. Svetozarovová, J. Coculová, and Z. Danková, "The impact of the global covid-19 pandemic on the selected practices of human resources management in the relationship to the performance of tourism companies," *Geoj. Tour. Geosites*, 2021, doi: 10.30892/GTG.35233-680.
- [5] Taslim Ahammad, "Personnel Management to Human Resource Management (HRM): How HRM Functions?," *J. Mod. Account. Audit.*, 2017, doi: 10.17265/1548-6583/2017.09.004.
- [6] Allam Jaas, "The Essence of Human Resources Management," *J. Adv. Res. Bus. Manag. Account. (ISSN 2456-3544)*, 2022, doi: 10.53555/nnbma.v8i1.1153.
- [7] A. Q. MOHAMMED, "HR ANALYTICS: A MODERN TOOL IN HR FOR PREDICTIVE DECISION MAKING," *J. Manage.*, 2019, doi: 10.34218/jom.6.3.2019.007.

- [8] C. De Gaetano, T. Meduri, and C. Tramontana, "The Fortification System of the Straits - The Evaluations as Decision Support in the Economic Development Strategies of the Metropolitan City," *Adv. Eng. Forum*, 2014, doi: 10.4028/www.scientific.net/aef.11.573.
- [9] A. A. H. Alharthy and N. Bin Marni, "Training Impact on the Human Resources Performance," *J. Southwest Jiaotong Univ.*, vol. 55, no. 3, 2020, doi: 10.35741/issn.0258-2724.55.3.12.
- [10] C. W. Lee, W. Wu, and C. F. Yang, "Employees' perceptions of training and sustainability of human resource," *Sustain.*, vol. 11, no. 17, 2019, doi: 10.3390/su11174622.
- [11] T. Beqiri and I. Mazreku, "Lifelong learning, training and development employee's perspective," *J. Educ. Soc. Res.*, 2020, doi: 10.36941/jesr-2020-0029.
- [12] E. N. Raidimi and H. M. Kabiti, "A review of the role of agricultural extension and training in achieving sustainable food security: a case of South Africa," *South African J. Agric. Ext.*, 2019, doi: 10.17159/2413-3221/2019/v47n3a520.
- [13] V. G. Goulart, L. B. Liboni, and L. O. Cezarino, "Balancing skills in the digital transformation era: The future of jobs and the role of higher education," *Ind. High. Educ.*, 2022, doi: 10.1177/09504222211029796.
- [14] J. DeJaeghere and A. Baxter, "Entrepreneurship education for youth in sub-Saharan Africa: A capabilities approach as an alternative framework to neoliberalism's individualizing risks," *Prog. Dev. Stud.*, 2014, doi: 10.1177/1464993413504353.
- [15] N. Aboobaker and R. D., "Human capital and entrepreneurial intentions: do entrepreneurship education and training provided by universities add value?," *Horiz.*, vol. 28, no. 2, pp. 73–83, Mar. 2020, doi: 10.1108/OTH-11-2019-0077.
- [16] L. S. Tudor, C. Langa, I. Bulgaru, and A. N. Lazar, "Study on the development of entrepreneurial culture in the university environment," 2020, doi: 10.1109/ECAI50035.2020.9223153.
- [17] D. Kim and D. Lee, "Impacts of Metacognition on Innovative Behaviors: Focus on the Mediating Effects of Entrepreneurship," *J. Open Innov. Technol. Mark. Complex.*, vol. 4, no. 2, p. 18, Jun. 2018, doi: 10.3390/joitmc4020018.
- [18] R. Passaro, I. Quinto, and A. Thomas, "The impact of higher education on entrepreneurial intention and human capital," *J. Intellect. Cap.*, vol. 19, no. 1, pp. 135–156, Jan. 2018, doi: 10.1108/JIC-04-2017-0056.
- [19] European Commission, "Entrepreneurship in higher education, especially within non-business studies," *Final Rep. Expert Gr.*, 2008.
- [20] S. Ofor-Douglas, "Repositioning University Education for Sustainable Youth Empowerment and National Development in Nigeria," *Int. J. Adv. Res.*, 2022, doi: 10.37284/ijar.5.1.1021.
- [21] P. E. Davis, J. S. Bendickson, J. Muldoon, and W. C. McDowell, "Agency theory utility and social entrepreneurship: issues of identity and role conflict," *Rev. Manag. Sci.*, 2021, doi: 10.1007/s11846-020-00423-y.
- [22] "Research on Construction of Innovation and Entrepreneurship Education Ecosystem in Higher Vocational Colleges Based on Process Orientation," 2017, doi: 10.25236/aepps.2017.121.
- [23] V. Iscaro, L. Castaldi, and E. Sepe, "ExperimentaLab: A virtual platform to enhance entrepreneurial education through training," *Ind. High. Educ.*, 2017, doi: 10.1177/0950422216684059.
- [24] M. Tekin, Ö. Koyuncuoğlu, T. Geçkil, and D. Baş, "Evaluation of Entrepreneurial-Innovative University Conditions and Activities from Students' Point of View in the Context of Industry 4.0," 2020, doi: 10.1007/978-3-030-31343-2\_53.
- [25] K. M. Champion, "A Risky Business? The Role of Incentives and Runaway Production in Securing a Screen Industries Production Base in Scotland," *M/C J.*, 2016, doi: 10.5204/mcj.1101.
- [26] M. T. Matriano and D. Suguku, "Entrepreneurship Growth in Oman: Position, Prospects and Growth of Entrepreneurial Education," *IJAEDU- Int. E-Journal Adv. Educ.*, 2015, doi: 10.18768/ijaedu.58791.
- [27] E. Stam and B. Spigel, "Entrepreneurial Ecosystems," in *The SAGE Handbook of Small Business and Entrepreneurship*, 2017.
- [28] K. J. Harkema, "An exploration into entrepreneurial marketing and firm profitability," 2018.
- [29] A. Salas-Amaro, "THE RELEVANCE OF LEADERSHIP EDUCATION IN GRADUATE BUSINESS PROGRAMS A FOCUS ON: SPIRITUALITY IN MODERN BUSINESS LEADERS," *J. Int. Manag. Stud.*, 2014, doi: 10.18374/jims-14-1.17.
- [30] A. S. Of and O. Countries, *Corporate Governance of stated-owned enterprises-A survey of OECD countries*. 2010.
- [31] A. Bris *et al.*, "KNIGHTS, RAIDERS, AND TARGETS - THE IMPACT OF THE HOSTILE

- TAKEOVER - COFFEE,JC, LOWENSTEIN,L, ROSEACKERMAN,S,” *J. Bank. Financ.*, 2021.
- [32] I. Nsereko, “Comprehensive social competence and social entrepreneurial action: the mediating role of entrepreneurial tenacity,” *World J. Entrep. Manag. Sustain. Dev.*, 2021, doi: 10.1108/WJEMSD-04-2020-0038.
- [33] A. Igwe, A. Ogbo, E. Agbaeze, J. Abugu, C. Ezenwakwelu, and H. Okwo, “Self-Efficacy and Subjective Norms as Moderators in the Networking Competence–Social Entrepreneurial Intentions Link,” *SAGE Open*, 2020, doi: 10.1177/2158244020934878.
- [34] S. L. Martínez-Martínez and R. Ventura, “Entrepreneurial Profiles at the University: A Competence Approach,” *Front. Psychol.*, 2020, doi: 10.3389/fpsyg.2020.612796.
- [35] C. Chien-Chi, B. Sun, H. Yang, M. Zheng, and B. Li, “Emotional Competence, Entrepreneurial Self-Efficacy, and Entrepreneurial Intention: A Study Based on China College Students’ Social Entrepreneurship Project,” *Front. Psychol.*, 2020, doi: 10.3389/fpsyg.2020.547627.
- [36] X. Xiang, J. Wang, Z. Long, and Y. Huang, “Improving the Entrepreneurial Competence of College Social Entrepreneurs: Digital Government Building, Entrepreneurship Education, and Entrepreneurial Cognition,” *Sustain.*, 2023, doi: 10.3390/su15010069.
- [37] J. Álvarez-García, E. Hormiga-Pérez, P. O. Sarango-Lalangui, and M. de la C. del Río-Rama, “Leaders’ sustainability competences and small and medium-sized enterprises outcomes: The role of social entrepreneurial orientation,” *Sustain. Dev.*, 2022, doi: 10.1002/sd.2291.
- [38] J. Gao, Y. Cheng, H. He, and F. Gu, “The Mechanism of Entrepreneurs’ Social Networks on Innovative Startups’ Innovation Performance Considering the Moderating Effect of the Entrepreneurial Competence and Motivation,” *Entrep. Res. J.*, 2023, doi: 10.1515/erj-2020-0541.
- [39] A. R. Shaidullina, V. G. Zakirova, S. N. Kashurnikov, E. N. Arestova, A. N. Shmidt, and N. I. Kovaleva, “Students training for innovative entrepreneurial activity: Social responsibility competences,” *Espacios*, 2018.
- [40] A. Yani, A. Eliyana, Hamidah, I. K. R. Sudiarditha, and A. D. Buchdadi, “The impact of social capital, entrepreneurial competence on business performance: An empirical study of SMEs,” *Syst. Rev. Pharm.*, 2020, doi: 10.31838/srp.2020.9.110.
- [41] J. Cui, “The impact of entrepreneurship curriculum with teaching models on sustainable development of entrepreneurial mindset among higher education students in china: The moderating role of the entrepreneurial climate at the institution,” *Sustain.*, 2021, doi: 10.3390/su13147950.
- [42] T. Sergeeva, M. Podbolotova, E. Natyrova, S. Averianova, and I. Lobanov, “Development of student entrepreneurial competence using the resources of social partnership,” *SHS Web Conf.*, 2021, doi: 10.1051/shsconf/20219802005.
- [43] D. L. Stufflebeam and C. L. S. Coryn, “Daniel Stufflebeam’s CIPP model for evaluation: An improvement and accountability oriented approach,” in *Evaluation theory, models, and applications: Research methods for the social sciences*, 2014.
- [44] K. A. Umam and I. Saripah, “Using the Context, Input, Process and Product (CIPP) Model in the Evaluation of Training Programs,” *Int. J. Pedagog. Teach. Educ.*, 2018, doi: 10.20961/ijpte.v2i0.26086.
- [45] C. Russon and K. Russon, “Daniel Stufflebeam and The World Bank,” *Eval. Program Plann.*, 2018, doi: 10.1016/j.evalprogplan.2017.12.011.
- [46] M. J. Afriati and M. Ahmad, “Quality Management Human Resource Training and Development,” *J. Curric. Indones.*, 2022.
- [47] H. Jia Bao, H. Kwek Cheng, S. Seksyen, and B. Baru Bangi Azizi Abu Bakar, “A Study on Human Resource Function: Recruitment, Training and Development, Performance Appraisal and Compensation,” *J. Glob. Bus. Soc. Entrep.*, 2021.
- [48] A. Hani Al-Kassem, “Significance of Human Resources Training and Development on Organizational Achievement,” *PalArch’s J. Archaeol. Egypt / Egyptol.*, 2021.
- [49] S. Surbhi, “Difference between Training and Development,” *Key Differences.*, 2018. .
- [50] R. F. Putri and Sopiah, “HUMAN RESOURCES TRAINING AND DEVELOPMENT: A SYSTEMATIC LITERATURE REVIEW AND BIBLIOMETRIC ANALYSIS,” *J. Ekon. Kreat. DAN Manaj. BISNIS Digit.*, 2022, doi: 10.55047/jekombital.v1i2.320.
- [51] D. Harding, A. L. Kadiyono, Y. Hidayat, and N. Yuniarti, “Human resource training and development asan answer toaec challenge,” *J. Psikol. Sains dan Profesi*, 2018.
- [52] N. M. Tri and L. N. Minh, “Factors affecting the role of education and training in human resource development of Vietnam,” *Int. J. Health Sci. (Qassim).*, vol. 6, no. S1, 2022, doi: 10.53730/ijhs.v6ns1.4742.



- [53] S. D. Apriliana and E. R. Nawangsari, "Competency-based human resource ( HR ) training and development," *Forum Ekon.*, 2021.
- [54] Y. Xie, F. Boadu, Z. Chen, and A. S. Ofori, "Multinational Enterprises' Knowledge Transfer Received Dimensions and Subsidiary Innovation Performance: The Impact of Human Resource Management Practices and Training and Development Types," *Front. Psychol.*, 2022, doi: 10.3389/fpsyg.2022.886724.
- [55] Gulzar Ahmad, "Human Resource Training and Development Awareness and Practices in Small, Medium and Large Organizations," *Acad. J. Soc. Sci. (AJSS)*, 2020, doi: 10.54692/ajss.2020.04011024.
- [56] A. Joel Samson, "80 Effects of Human Resource Training and Development on Productivity in Nigerian Hospitality Industry," *Int. J. Public Adm. Manag. Res.*, 2014.
- [57] A. G. Desta, "Linking human resource training and development, employee commitment and job satisfaction: The moderation role of the work environment," *Int. J. Manag. Entrep. Soc. Sci. Humanit.*, 2021, doi: 10.31098/ijmesh.v4i1.535.
- [58] B. L. Lok, M. Y. Cheng, and C. K. Choong, "The relationship between soft skills training and development, human resource outcome and firm performance," *Int. J. Bus. Soc.*, 2021, doi: 10.33736/IJBS.3184.2021.
- [59] H. Abdullah, "Major challenges to the effective management of human resource training and development activities," *J. Int. Soc. Res.*, 2009.
- [60] B. G. Rocha *et al.*, "Perception of pharmacists regarding human resources, training, and development of a national hospital pharmacy: a preliminary report on Basel Statements," *Brazilian J. Pharm. Sci.*, 2022, doi: 10.1590/s2175-97902022e19877.
- [61] R. J. Torraco and H. Lundgren, "What HRD Is Doing—What HRD Should be Doing: The Case for Transforming HRD," *Human Resource Development Review*. 2020, doi: 10.1177/1534484319877058.
- [62] F. V. Mitsakis, "Human resource development (HRD) resilience: a new 'success element' of organizational resilience?," *Hum. Resour. Dev. Int.*, 2020, doi: 10.1080/13678868.2019.1669385.
- [63] S. N. Ngambi and W. W. Chakanika, "University Extension Education in Zambia: increasing Opportunities for Human Resource Training and Development," *Multidiscip. J. ....*, 2020.
- [64] J. You, S. Kim, K. Kim, A. Cho, and W. Chang, "Conceptualizing meaningful work and its implications for HRD," *Eur. J. Train. Dev.*, 2021, doi: 10.1108/EJTD-01-2020-0005.
- [65] D. Kreismann and T. Talaulicar, "Business Ethics Training in Human Resource Development: A Literature Review," *Human Resource Development Review*. 2021, doi: 10.1177/1534484320983533.
- [66] K. M. Dirani *et al.*, "Leadership competencies and the essential role of human resource development in times of crisis: a response to Covid-19 pandemic," *Hum. Resour. Dev. Int.*, 2020, doi: 10.1080/13678868.2020.1780078.
- [67] J. Gold, P. Jolliffe, J. Stewart, C. Glaister, and S. Halliday, "Futures and foresight learning in HRD," *Eur. J. Train. Dev.*, 2022, doi: 10.1108/EJTD-05-2022-0059.
- [68] V. Anderson, "A digital pedagogy pivot: re-thinking higher education practice from an HRD perspective," *Hum. Resour. Dev. Int.*, 2020, doi: 10.1080/13678868.2020.1778999.
- [69] A. Chatzimouratidis, I. Theotokas, and I. N. Lagoudis, "Decision support systems for human resource training and development," *Int. J. Hum. Resour. Manag.*, 2012, doi: 10.1080/09585192.2011.561235.
- [70] A. Mulang, "The Importance of Training for Human Resource Development in Organization," *J. Public Adm. Gov.*, 2015, doi: 10.5296/jpag.v5i1.7505.
- [71] T. L. Fung, J. K. Chou, and K. L. Ma, "A design study of personal bibliographic data visualization," 2016, doi: 10.1109/PACIFICVIS.2016.7465279.
- [72] M. E. Falagas, A. Zarkali, D. E. Karageorgopoulos, V. Bardakas, and M. N. Mavros, "The Impact of Article Length on the Number of Future Citations: A Bibliometric Analysis of General Medicine Journals," *PLoS One*, 2013, doi: 10.1371/journal.pone.0049476.
- [73] M. N. Jotabá, C. I. Fernandes, M. Gunkel, and S. Kraus, "Innovation and human resource management: a systematic literature review," *European Journal of Innovation Management*. 2022, doi: 10.1108/EJIM-07-2021-0330.
- [74] M. N. Hudha, I. Hamidah, A. Permasari, A. G. Abdullah, I. Rachman, and T. Matsumoto, "Low carbon education: A review and bibliometric analysis," *European Journal of Educational Research*. 2020, doi: 10.12973/eu-jer.9.1.319.

- [75] T. Amutuhaire, "The Reality of the 'Publish or Perish' Concept, Perspectives from the Global South," *Publ. Res. Q.*, 2022, doi: 10.1007/s12109-022-09879-0.
- [76] M. Lambovska and D. Todorova, "'Publish and flourish' instead of 'publish or perish': A motivation model for top-quality publications," *J. Lang. Educ.*, 2021, doi: 10.17323/jle.2021.11522.
- [77] B. Davies and G. Felappi, "Publish or Perish," *Metaphilosophy*, 2017, doi: 10.1111/meta.12269.
- [78] S. Susilaningsih, "Pendidikan Kewirausahaan Di Perguruan Tinggi: Pentingkah Untuk Semua Profesi?," *J. Econ.*, vol. 11, no. 1, p. 1, 2015, doi: 10.21831/economia.v11i1.7748.
- [79] Y. Stamboulis and A. Barlas, "Entrepreneurship education impact on student attitudes," *Int. J. Manag. Educ.*, 2014, doi: 10.1016/j.ijme.2014.07.001.
- [80] D. Rae, "Entrepreneurial learning: peripherality and connectedness," *Int. J. Entrep. Behav. Res.*, vol. 23, no. 3, pp. 486–503, 2017, doi: 10.1108/IJEBR-05-2016-0132.
- [81] L. Rashid, "Entrepreneurship education and sustainable development goals: A literature review and a closer look at fragile states and technology-enabled approaches," *Sustainability (Switzerland)*, vol. 11, no. 19, 2019, doi: 10.3390/su11195343.
- [82] S. M. Indrawati and A. Kuncoro, "Improving Competitiveness Through Vocational and Higher Education: Indonesia's Vision For Human Capital Development In 2019–2024," *Bull. Indones. Econ. Stud.*, vol. 57, no. 1, pp. 29–59, Jan. 2021, doi: 10.1080/00074918.2021.1909692.
- [83] V. Ratten, "Coronavirus and international business: An entrepreneurial ecosystem perspective," *Thunderbird International Business Review*. 2020, doi: 10.1002/tie.22161.