

HUMAN RESOURCES TRAINING AND DEVELOPMENT : A SYSTEMATIC LITERATURE REVIEW AND BIBLIOMETRIC ANALYSIS

Rifqa Faulia Putri^{1*}, Sopiah²

^{1,2} Universitas Negeri Malang

Email: ¹⁾ rifqa.faulia.2204138@students.um.ac.id, ²⁾ sopiah.fe@um.ac.id

Abstract

A company to continue to grow, it must be supported by human resources who have good competence and are also reliable. Therefore, human resources in companies must pay attention to their needs in increasing their abilities and skills through training and development. This study aims to examine more broadly about the training and development of human resources. The literature in this study used three databases Taylor & Francis, Sage Journals and Emerald Insight to filter articles published in 2017-2022 with bibliometric studies and PRISMA (Preferred Reporting Items for Systematic Reviews and Metaanalysis) method to gain 30 articles. The results describe the analysis of 132 authors based on co-authorship, and new keywords from co-occurrence data such as training need assessment, skill development, work engagement, training model and higher education. In addition, there are top 10 citations revealed. This research is expected to be a reference for next research on HR training and development.

Keywords: Training, HR Development, Human Resources Management

INTRODUCTION

Human resources are one of the most significant assets a firm must have. Consequently, the need for human resource training and development must be considered. The success and effectiveness of an organization depends on how far the efforts of the employees of the organization are recognized by the company (Eliphass & S, 2017) . Training programs must be designed and delivered to meet the needs of employees and the organization. Then the planned staff/employee development process can help equip them with the new technological skills needed to improve their job performance and prevent skills from becoming obsolete (Cobblah & van der Walt, 2017) .

In addition, policies and practices that support training and development can affect employee activity levels, thereby providing opportunities for employees to participate, which will increase employee commitment to the organization (Susomrith et al., 2019). The practice of training and development is considered as a message to employees that the organization values and cares about their professional development (Kozhakhmet et al., 2022a) .

It can be concluded that each employee training and development can create good changes if human resources can take advantage of these facilities, so that they can help achieve company goals.

Some literature also supports research that trained human resources are a critical success factor for organizations/companies (Cobblah & van der Walt, 2017; Kozhakhmet et al., 2022a; Ozkeser, 2019). Therefore, the purpose of this study is to find out how the methods and developments of HR training and development are applied by companies using the systematic literature review method with PRISMA and bibliometric analysis. This is to formulate the formulation of existing problems related to training and HR development related to the work involvement of an employee, assessing training needs and

LITERATURE REVIEW

HR Training and Development

Training

According to Dessler (2020) training is a process of pursuing the skills needed by employees in carrying out their work, in which employee training provides practical knowledge and its application in the company's work world to increase work productivity in achieving the goals desired by the company organization.

The training program has three phases of activity which include:

1. Training needs analysis, aims to show up information to determine if a training program is needed
2. Development of training programs, aimed at design the training environment and training methods necessary to achieve training goals,
3. Evaluation of a training program aimed at testing and evaluating whether the implemented program actually achieves the stated goals (Dessler, 2020).

Development

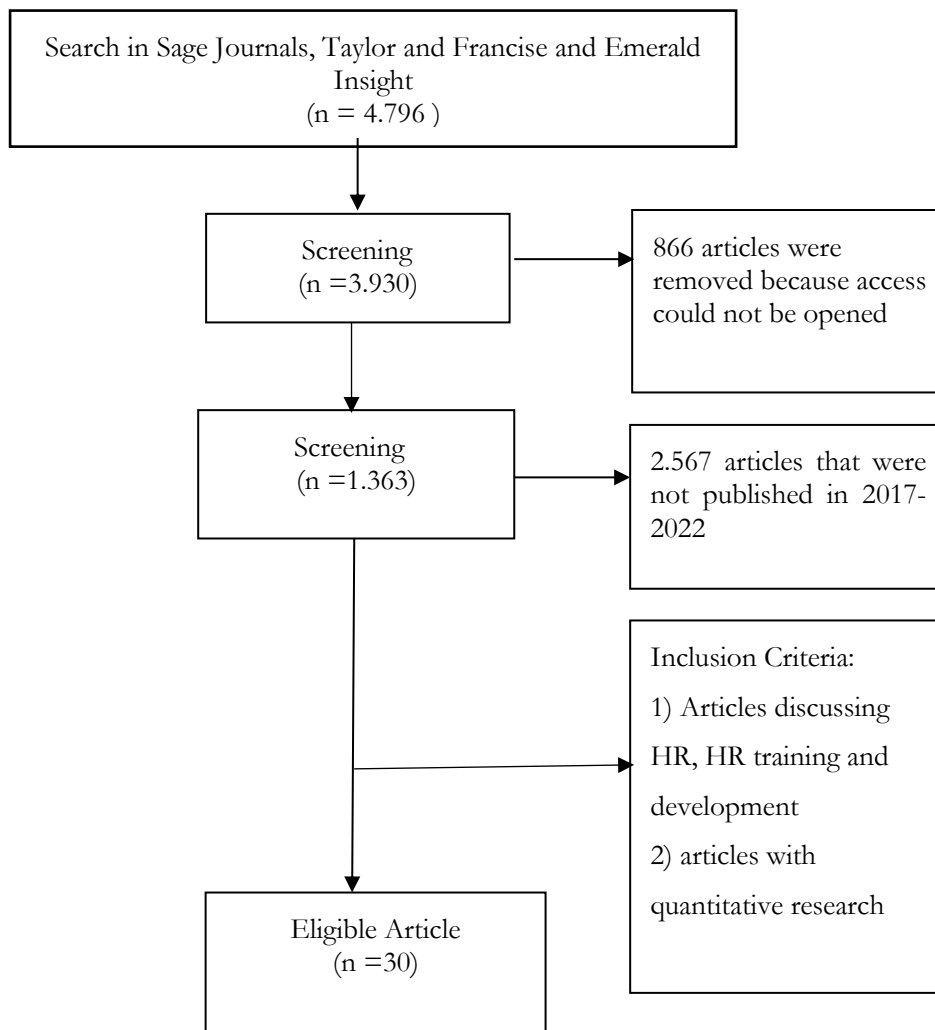
According to Kurniawati (2020), HR development is a planned effort by the organization to improve HR competence which is carried out continuously in the long term, which is carried out to ensure the availability of HR in accordance with the needs of the position, and is aimed at improving individual performance which leads to organizational performance.

Development implementation is carried out by implementing the following strategies:

1. Strategy's Role Management Development, namely management development methods carried out in line with the company's strategic plan.
2. In the context of evaluating candidates and the 9-box grid, or developing employees for higher positions, it is done by applying assessments and 9 competence boxes
3. Managerial On the Job Training and Rotation, development in the work environment that can be done through coaching (assistance), action learning, stretch assignments (encouraging employees to complete work beyond their comfort zone).
4. Off the Job Management Training and Development Techniques, namely development methods carried out outside the work environment through seminars, university/campus programs, role play, corporate universities (internal development centers), executive training, learning system for SHRM (Society) certification for Human Resource Management)

RESEARCH METHODS

This study uses a systematic literature review (SLR) method with PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-analysis) to evaluate a systematic review. The databases used in this study are Taylor & Francise, Emerald Insight and Sage Journals. Search for articles relevant to this research using the keywords “training and development” and “human resources” with inclusion criteria (1) articles with discussions on human resources, training and development of human resources; (2) articles published in the span of 5 years (2017-2022); (3) quantitative research articles.

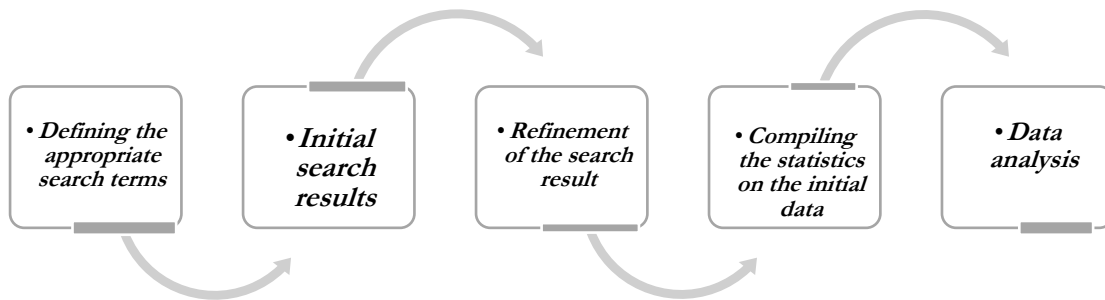


Source: Data processed by researchers (2022)

Figure 1. PRISMA method

Bibliometric Analysis

In this bibliometric analysis, static and detailed methods are used (Garza-Reyes, 2015). Bibliometric analysis is an approach to examine the evolution of research domains, including topics and authors, based on the social, intellectual, and conceptual structure of the discipline (Donthu et al., 2020). The bibliometric method in this study with five stages was adopted from the approach used by Fahimnia, et al (2015) which presented in a graph as below:



Source: (Fahimnia et al., 2015)

Figure 2. Five Stages of the Bibliometric Literature Study method

First Stage (*Defining the Appropriate Search Terms*)

The keywords used in this study for data collection are "training & development" and "human resources". The aim is to analyze literature sources by using publishers, Sage Journals, Emerald Insight and Taylor & Francis. This search was conducted in October-November 2022.

Second Stage (*Initial Search Result*)

The search criteria for supporting articles in this study are limited, which is 5 years ago, that means from 2017-2022.

Third Stage (*Refinement of the Search Result*)

The article search results were then filtered according to the criteria, and found as many as 30 articles according to the keywords and criteria that have been set

Fourth Stage (*Compiling the Statistics on the Initial Data*)

From the search results, the articles were then collected into one folder in the RIS format by collecting information related to the article such as title, author's name, keywords and journal specifications (published journal, year of publication, and publication).

Fifth Stage (*Data Analysis*)

At this stage, the data analysis used in this research is using VOSviewer software for bibliometric analysis by looking at co-authorship, co-occurrence, and citations.

RESULTS AND DISCUSSION

Research result

A. Co-Authorship

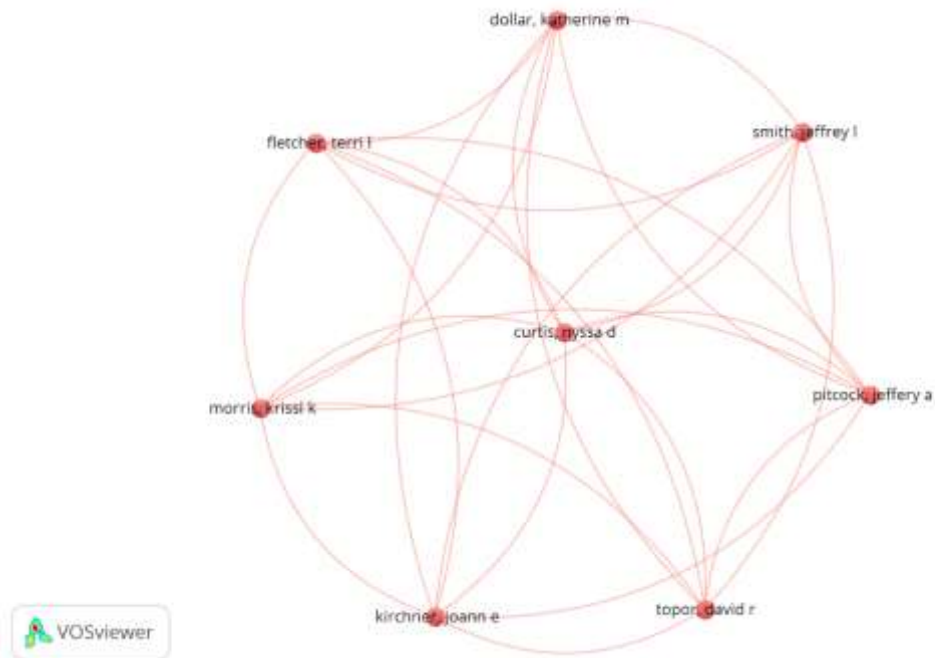


Figure 3. Co-Authorship (network visualization)

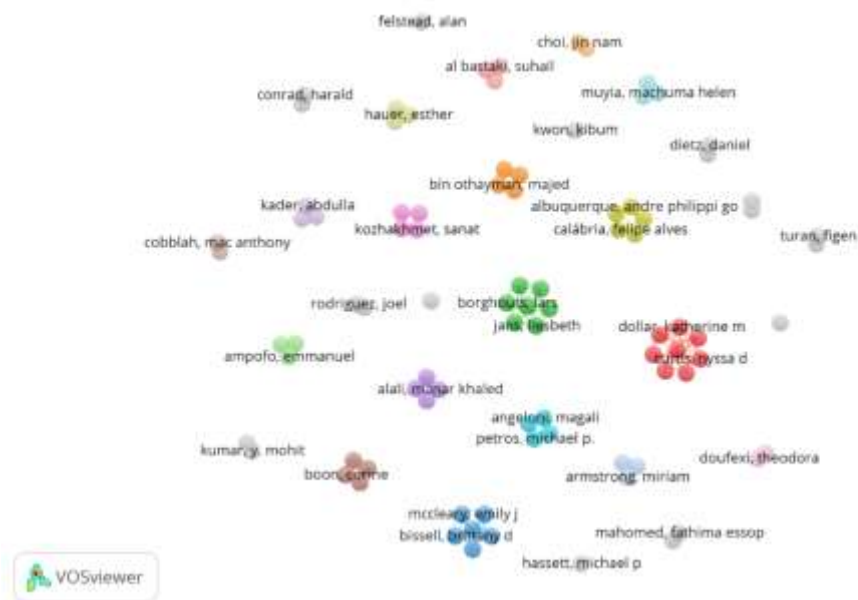


Figure 4. Co-Authorship (Unrelated)

Based on the picture above (figure 3), we can be seen that there is only 1 author's network, that means an original network is the most capable. However, in Figure 4 it can be seen that there are 30 articles/clusters that do not have a relationship with each other, and as many as 132 authors with 30 clusters compiled a join study.

B. Co-Occurrence

The keywords of a topic of Human Resources training and development are very diverse, as can be seen in Figure 5 below, that this analysis allows many clusters to be investigated more deeply on the research topic.

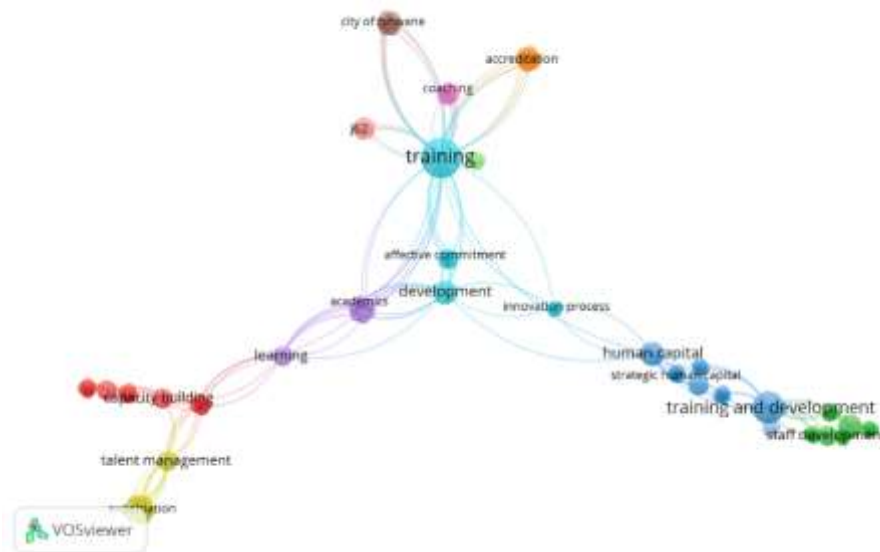


Figure 5. Co-Occurrence (Network Visualization)

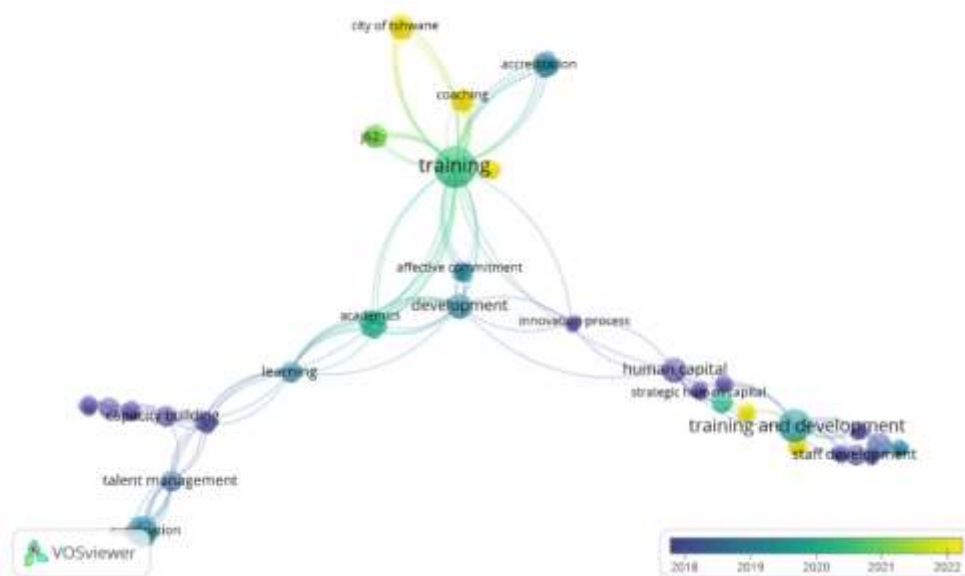


Figure 6. Co-Occurrence (Overlay Visualization)

In the picture above, we can see an overlay visualization related to keywords is growing every year. From Figure 5, it can be seen that until 2022, quite a number of new keywords have emerged related to human resources and HR training and development such as "training need assessment", "skill development", "work engagement", "training model" and "higher education"

C. Citation

The analysis of the most citations in the research topic regarding human resources training and development is to find out which articles have the most influence on the topic (Dwitanti & Churiyah, 2022) .

Here are the top 10 rankings cited in this study:

Table 1. Top 10 Cite Articles

No	Publication Year	Author	Title	Journal	Cite	Publishers
1	2017	Rodriquez, J & Wellters, K	The Importance of Training and Development in Employee Performance and Evaluation	International Journal Peer Reviewed Journal Refereed Journal	163	Emerald Insight
2	2018	Sung & Choi, J	Effects of training and development on employee outcomes and firm innovative performance: Moderating roles of voluntary participation and evaluation	Human resource management	68	Emerald Insight
3	2019	(Conrad & Meyer Ohle)	Overcoming the ethnocentric firm? – foreign fresh university graduate employment in Japan as a new international human resource development method	The International Journal of Human Resource Management	45	Taylor and Francis
4	2019	Susomrith, p., et al	Training and development in small professional services firms	European Journal of Training and Development	30	Emerald Insight

5	2017	Coblah & Van Der Walt	Staff training and development programs and work performance in the university libraries in Ghana	Information Development	28	Sage Journals
6	2019	Kwon, K	The long-term effect of training and development investment on financial performance in Korean companies	International Journal of Manpower	27	Emerald Insights
7	2017	Slingerland, et al	Development and optimization of an in-service teacher training program on motivational assessment in physical education	European Physical Education Review	24	Sage Journals
8	2018	Felstead, A	Tracing the connections: short-termism, training and recession	The International Journal of Human Resource Management	23	Taylor and Francis
9	2019	Paposa & Kumar	Impact of Training and Development Practices on Job Satisfaction: A Study on Faculty Members of Technical Education Institutes	Management and Labor Studies	23	Sage Journals
10	2020	Essop Mahomed & Rothmann	Strength use, training and development, thriving, and intention to leave: the mediating effects of psychological need satisfaction	South African Journal of Psychology	22	Sage Journals

Source: Data processed by researchers (2022)

Based on table 1 above, it is known that the top 10 article citations, the first is research by Rodriguez & Walters (2017) with 163 citations. This article discusses the importance of HR training and development in employee performance and evaluation. In the study, it can

be concluded that without proper training and development opportunities, employees cannot complete their responsibilities with good potential.

Furthermore, for the second most citations, namely research conducted by Sung & Choi (2018) with 68 citations. This article discusses how this training and development (T&D) influences the innovations carried out by companies. In the research, it can be concluded that employees will increase their competence through T&D without coercion so that positive perceptions of employees regarding company innovation grow.

Finally, for the third most citations, namely research carried by Conrad & Meyer-Ohle (2019) which discusses trends in human resource management looking at HR development methods. Which is expected to pay more attention to employee development and employment practices in the company.

The explanation of the three top articles can have a significant influence on the topic of this research when viewed from the large number of citations. As for 7 other articles (Cobblah & van der Walt, 2017; Felstead, 2018; Kwon, 2019; Mahomed & Rothmann, 2019; Paposa & Kumar, 2019; Slingerland et al., 2017; Susomrith et al., 2019) which can be seen in table 1 above.

Discussion

Based on the results of the analysis that has been carried out, there are research results regarding human resources training and development where there is still little relationship between the authors with each other, in this study there is only 1 cluster, so it is hoped that in the future more researchers will be interrelated to produce research which is even better.

Then in the development of keyword analysis until 2022, there are quite a few new keywords that have appeared related to human resources and human resource training and development, such as training need assessment, skill development, work engagement, training model and higher education and so on. This shows that the main topic of discussion is growing and discussed for further research.

Based on previous studies, which discussed the practice of HR training and development in companies and their impact on the effect of employee retention (Dietz & Zwick, 2021; Kozhakhmet et al., 2022b) . According to Khan et al. (2018) high investment in training and development; and when the expected turnover rate is high, less investment should be made By providing core expertise and structure during the employee training and

development process, it can increase the individual's potential to effectively deliver the mission (Sung & Choi, 2018) .

In other words, a well-planned and implemented training program will definitely help employees whet their skills towards increasing skill development and promotion (Hauer et al., 2017; Mahomed & Rothmann, 2020; Paposas & Kumar, 2019). Hence, it can be concluded, Training and Development (R&D) can meet the strategic needs of training teams and prepare them for the future.

In addition, Khan et al. (2018) reveals that a well-trained workforce will show more commitment to an organization. The organization will not only experience improved performance levels, but also a higher employee retention rate. Supported by work engagement which according to job resources is positively correlated with job involvement and that having access to a strong set of job resources is effective in reducing employee burnout (Bakker et al., 2007 in (Armstrong et al., 2019; Hassett, 2022) .

CONCLUSION

This study aims to analyze literature sources related to the keyword "human resources training and development". With bibliometric studies and PRISMA (Preferred Reporting Items for Systematic Reviews and Metaanalysis) method. Training is a program used to develop the knowledge and skills of employees. Meanwhile, development is an educational process that is prepared for a long time using a structured and structured procedure, where managerial members will learn contextual and theoretical knowledge as a general goal. Training and development must be conducted and evaluated in a fair and transparently to determine the effectiveness of employee training and development program implementation.

REFERENCES

- Armstrong, M., Black, D., & Miller, A. (2019). Quality criteria for core medical training: A resume of their development, impact and future plans. *Journal of the Royal College of Physicians of Edinburgh*, 49(3), 230–236. <https://doi.org/10.4997/JRCPE.2019.313>
- Cobblah, M. A., & van der Walt, T. B. (2017). Staff training and development programmes and work performance in the university libraries in Ghana. *Information Development*, 33(4), 375–392. <https://doi.org/10.1177/0266666916665234>
- Conrad, H., & Meyer-Ohle, H. (2019). Overcoming the ethnocentric firm? – foreign fresh university graduate employment in Japan as a new international human resource development method. *The International Journal of Human Resource Management*, 30(17),

2525–2543. <https://doi.org/10.1080/09585192.2017.1330275>

- Danvila-del-Valle, I., Estévez-Mendoza, C., & Lara, F. J. (2019). Human resources training: A bibliometric analysis. *Journal of Business Research*, 101, 627–636. <https://doi.org/https://doi.org/10.1016/j.jbusres.2019.02.026>
- Dessler, G. (2018). I am sharing “Gary Dessler - Human resource management-Pearson (2020)” with you. In *Human resource management / Gary Dessler, Florida International University*.
- Dietz, D., & Zwick, T. (2021). The retention effect of training: Portability, visibility, and credibility1. *International Journal of Human Resource Management*, 33(4), 710–741. <https://doi.org/10.1080/09585192.2020.1737835>
- Donthu, N., Kumar, S., & Pattnaik, D. (2020). Forty-five years of Journal of Business Research: A bibliometric analysis. *Journal of Business Research*, 109(October 2019), 1–14. <https://doi.org/10.1016/j.jbusres.2019.10.039>
- Dwitanti, E., & Churiyah, M. (2022). No Title. *Jurnal Syntax Transformation*, 3(5).
- Eliphas, M. R., & S, M. L. (2017). The influence of performance appraisal practices on employee productivity: A case of Muheza District, Tanzania. *Issues in Business Management and Economics*, 5(4), 45–59.
- Fahimnia, B., Sarkis, J., & Davarzani, H. (2015). Green supply chain management: A review and bibliometric analysis. In *International Journal of Production Economics* (Vol. 162). Elsevier. <https://doi.org/10.1016/j.ijpe.2015.01.003>
- Felstead, A. (2018). Tracing the connections: short-termism, training and recession. *International Journal of Human Resource Management*, 29(4), 664–682. <https://doi.org/10.1080/09585192.2016.1184176>
- Garza-Reyes, J. A. (2015). Lean and green-a systematic review of the state of the art literature. *Journal of Cleaner Production*, 102, 18–29. <https://doi.org/10.1016/j.jclepro.2015.04.064>
- Hassett, M. P. (2022). The Effect of Access to Training and Development Opportunities, on Rates of Work Engagement, Within the U.S. Federal Workforce. *Public Personnel Management*, 51(3), 380–404. <https://doi.org/10.1177/00910260221098189>
- Hauer, E., Westerberg, K., & Nordlund, A. M. (2017). Intervening with care – varying outcomes of a training and development programme in elderly care in Sweden. *Journal of Vocational Education & Training*, 69(4), 617–636. <https://doi.org/10.1080/13636820.2017.1309567>

- Khan, R., Pramjeeth, S., & Kader, A. (2018). The Impact of Educational Technology on Training and Development in the Banking Sector. *Africa Education Review*, 15(1), 85–107. <https://doi.org/10.1080/18146627.2016.1241674>
- Kozhakhmet, S., Moldashev, K., Yenikejeva, A., & Nurgabdeshev, A. (2022b). How training and development practices contribute to research productivity: a moderated mediation model. *Studies in Higher Education*, 47(2), 437–449. <https://doi.org/10.1080/03075079.2020.1754782>
- Kurniawati. (2020). Pengembangan Sumber Daya Manusia (1st ed.). Universitas Terbuka
- Kwon, K. (2019). The long-term effect of training and development investment on financial performance in Korean companies. *International Journal of Manpower*, 40(6), 1092–1109. <https://doi.org/10.1108/IJM-10-2017-0286>
- Mahomed, F. E., & Rothmann, S. (2019). Strength use, training and development, thriving, and intention to leave: the mediating effects of psychological need satisfaction. *South African Journal of Psychology*, 50(1), 24–38. <https://doi.org/10.1177/0081246319849030>
- Mahomed, F. E., & Rothmann, S. (2020). Strength use, training and development, thriving, and intention to leave: the mediating effects of psychological need satisfaction. *South African Journal of Psychology*, 50(1), 24–38. <https://doi.org/10.1177/0081246319849030>
- Ozkeser, B. (2019). Impact of training on employee motivation in human resources management. *Procedia Computer Science*, 158, 802–810. <https://doi.org/10.1016/j.procs.2019.09.117>
- Paposa, K. K., & Kumar, Y. M. (2019). Impact of Training and Development Practices on Job Satisfaction: A Study on Faculty Members of Technical Education Institutes. *Management and Labour Studies*, 44(3), 248–262. <https://doi.org/10.1177/0258042X19851649>
- Rodriguez, J., & Walters, K. (2017). The Importance of Training and Development in Employee Performance and Evaluation. *International Journal Peer Reviewed Journal Refereed Journal Indexed Journal UGC Approved Journal Impact Factor*, 3(10), 206–212. <https://www.researchgate.net/publication/332537797%0Awww.wvjmr.com>
- Slingerland, M., Borghouts, L., Jans, L., Weeldenburg, G., van Dokkum, G., Vos, S., & Haerens, L. (2017). Development and optimisation of an in-service teacher training programme on motivational assessment in physical education. *European Physical Education Review*, 23(1), 91–109. <https://doi.org/10.1177/1356336X16639212>

- Sung, S. Y., & Choi, J. N. (2018). Effects of training and development on employee outcomes and firm innovative performance: Moderating roles of voluntary participation and evaluation. *Human Resource Management*, 57(6), 1339–1353. <https://doi.org/https://doi.org/10.1002/hrm.21909>
- Susomrith, P., Coetzer, A., & Ampofo, E. (2019). Training and development in small professional services firms. *European Journal of Training and Development*, 43(5/6), 517–535. <https://doi.org/10.1108/EJTD-11-2018-0113>