International Journal of Economy, Education and Entrepreneuship
p-ISSN: 2798-0138 | e-ISSN: 2798-012X
Vol. 2, No. 3, December 2022
https://doi.org/10.53067/ije3.v2i3

THE EFFECT OF LEADERSHIP SKILLS AND TRAINING ON EMPLOYEE PERFORMANCE BY MEDIATION OF INNOVATION CAPACITY IN GLASS MANUFACTURING COMPANIES

Susilo Purnaman[1], Furtasan Ali Yusuf[2], Uli Wildan Nuryanto[3]
[1,2,3]Bina Bangsa University, Indonesia
Email: *susilo.purnaman@gmail.com*[1]

Abstract
This study investigates the role that innovative capacity plays in the functioning of glass manufacturing businesses. A behavioral approach is taken toward leadership skills, as well as employee training, in the design of the research method. The employees of the production divisions of PT. Fortuna Inti Talenta (140 respondents) and PT. Maruni Daya Sakti makes up the research sample (140 respondents). The results of study 1) leadership has a positive and significant effect on innovation capacity and employee performance (0.002 and 000). 2. Job training positively and significantly affects innovation capacity and employee performance (0.000 and 0.017). Finally, 3) innovation capacity positively and significantly affects employee performance. (0.001).
Limitations of the research, the number of participants in this study's sample was lower than the minimum required (560 respondents). As a result, the subsequent researcher will be able to analyze based on the total number of samples from respondents.
Keywords: *Leadership Skills, Training, Employee Performance, Innovation Capacity*

INTRODUCTION

Globalization competition is inevitable for both developed and developing nations. Businesses devise strategies to outperform the competition by drawing on the resources of their employees, investors, technology, and customers. Because humans are one of the company's factors of production, they play an important part in the business's operation and help determine its success level. Therefore, leadership talent (leadership skills) should be attached to employees because the progress and development of the company depend on leadership. Agbanusi (2021) concludes that the administration must absorb the spirit of democracy and sustainable learning (training) patterns to improve national development. The essence of democracy should not be described in a negative form but should be treated as a form of professional work behavior. Sakr et al. (2022) state that professional conduct can identify through conceptual skills and administrative skills to build a work ethic (performance).

In contrast to the measurement tool for leadership skill development *(leadership skill)* from Kobicheva (2021), which measures virtual devices as a tool for developing leadership skills and the researcher identified the measurement tool for leadership talent using *Key Performance Indicators* such as *Suggestion Rate, Absenteeism, Employee Turnover, Employee Training*, Percentage of Responses to Employee Suggestions, *Number of Accidents*, *Employee Productivity*, Employee Mutation, Employee Lateness, and Percentage of Health Service Fulfillment.

Leadership skills are very important in the workplace, where a leader must unite subordinates or employees from various divisions to function together and work together. For example, when a team, project, department, or company is having trouble sorting out solutions and deciding on a direction, a leader must be there to organize and make arrangements. In addition, *leadership skills* are important for

Vol. 2, No. 3, December 2022, pp. 632-643
https://doi.org/10.53067/ije3.v2i3.104

people who occupy important positions in the company (*top-level management*) and for every professional to have these skills so that they become productive team members and can fully contribute to the company.

Leadership skills vary according to the way the company. Company employees are human resources trained, patterned, and designated as the company's major capital to run the company's business. One of the human resource standards is leadership, training, and innovation. In 1970, the glass company started to run its business and began to develop downstream human resources to work and achieve the target of glass products. The products of this glass processing include flat glass, safety glass, mirror glass, fiberglass, and other glass. Flat glass is a semi-finished product processed into various products: *clear glass*, *tinted float glass*, *online reflective glass*, *patterned glass*, and *mirrors*.

Literature Review

Employee Performance Behavior

Performance Employee originated from *job performance* or *actual performance* (performance work or performance achieved by someone), or also the results of work in terms of quality and quantity to conduct by an employee in carrying out their duties following their responsibilities. The answer given by Paais & Pattiruhu (2020) Employee performance studies has shown that several dependent variables have an important role in influencing job performance and satisfaction. This study also adds empirical considerations in management science about the motivational aspects of leadership and its beneficial effects on organizations. In many human resource management theory studies, employees are valuable assets that companies or organizations must maintain because they are the spearhead of the production process. This research also enriches the results of previous studies relevant to this case study. The composition of motivation as a driving factor in improving employee performance and satisfaction must be distinct from the role of leadership in changing the organizational atmosphere to be more optimal and professional.

In the behavioral approach in management, performance is the quantity or quality of something produced or services rendered by a person performing a job. Performance is the results of work that can achieve by somebody or groups within the organization that aims to achieve organizational goals. Atatsi et al. (2019) stated that employee performance behavior innovation could understand through the definition of employee performance, cultural diversity, corporate settings, and instruments used so that performance can develop within the organization. Therefore, we define performance as performance work or results from work (*output)* of good quality nor the quantity achieved in a time in carrying out its duties following with not quite enough answer which given and results in work following which is expected by the organization, through criteria which there is on performance anemployee in the organization.

Method Evaluation Performance and work environment

The work environment is a workplace that contains people, work tools, organizational divisions, regulatory devices, and local work culture. The complexity of the work environment produces a new paradigm that adds value to the profession according to culture, for example, the Malay culture (ASMURI et al., 2021). some methods of evaluation of Performance Employees can be applied, namely:

a. Method Scale Rating

   This system creates a list of characteristics and fields or behavior which will assess. The strength of this system is that it can complete quicklyand with effort as often as possible. However, this is the subjective weakness of the system because the assessment criteria used are vague and lacking appropriate, specifically on a scale used.

b. Method List Question (Checklist*)*

   The result of the questionnaire method is the weight of the scores on the sheet *checklist*, but the list could make as description results work employee which accurate. The advantage is the inexpensive cost and easy management. Assessors only need a simple training time and standardization. Weaknesses are located in the deviation evaluator, which prioritizes employees' criteria in determining criteria results work.

c. Method Choice directed (*Forced Choice methods*)

   This system uses evaluations on five scales: very high performance tall, perform average tall, perform moderate, perform average low, and perform very low. The strength system could identify employees who have only four or five employees to distribute it to five levels.

d. Method Incident Critical (*Critical Incident methods*)

   On a system, this is held with making notes example, outside theusual good or undesirable work-related behavior of somebody's employee and reviewing it together with employee other on time whichhas been determined previously. The profit method serves fact-specific hard facts to explain the evaluation and ensure that Leaders think about evaluation and identify examples specifically about good or bad performance and planning improvements to slump. Weaknesses are difficult to evaluate or warn employees related to one another.

Leadership and management skills

Leadership is the ability of a leader to influence a group toward goal achievement. This influencing activity means leaders have the knowledge, skills, and role model to direct and invite subordinates to achieve organizational goals.

Gümüş et al. (2020) broadly mention developing leadership skills toward human and financial resources. This situation is based on the development of an understanding of leadership as an activity or art of influencing others to want to work together based on one's ability leaders to guide others to

achieve organizational goals. Leadership skills are the ability of a leader who can direct, influence, and teach others to achieve the organization*'s goals*.

The leadership's critical perspective has been recognized by various circles and impacts multiple fields. Beauchamp et al. (2021) mention that the administration of institutions, such as schools, requires communication and commitment that outlines professional narratives between administrative organs and the process of building additional relationships that involves many external parties. Leadership skills are inseparable from change management and behavior in the transition to changes in the work environment. Policy direction is still considered not a skill, so it can reduce the added value of leadership in management.

Employee training

Employee training is an activity and effort to improve the competence, attitude, knowledge, and skills of human resources. These factors have a close relationship, so they cannot separate because they are mutually supportive and complementary. Urbancová et al. (2021) stated that if an organization wants to thrive in today's highly competitive environment, it cannot do so without continuous training and development of its employees. The benefit to the individual can be judged by his measurable level of knowledge, mastery of certain operations, etc. However, evaluating the effectiveness of training is not easy because, very often, we work with quantities that are difficult to measure and, therefore, difficult to measure size. The prerequisite is the proper definition of educational goals and ensuring the controllability of academic (training) outcomes.

Training is systematically improving and following the needs of employees by increasing skills, knowledge, understanding, and self-motivation. Employee learning process training allows employees to carry out work following company standards. In addition, activity positively impacts employees' knowledge and skills and is responsible according to their respective capacities.

Hammond & Churchill (2018) provide a view that training and development is a field related to organizational activities aimed at improving the performance of individuals and groups in corporate settings. Therefore, training is an organization with a systematic and active design where employees can improve knowledge, skills, and understanding or motivation. And as a routine performance improvement process, increasing knowledge, skills, experience, and inspiration to carry out work effectively and efficiently. Efficient in achieving certain goals.

Hypothesis

Leadership Skills are key attributes of executives. They enable managers to plan organizations, make decisions, guide teams and realize company goals. During the process, leaders use their skills to communicate, persuade, schedule time, and monitor overall progress. Leaders who develop *leadership*

skills constantly adapt ideas and behavioral approaches to improve products and services and ensure the involvement of their best talents (see Figure 1).

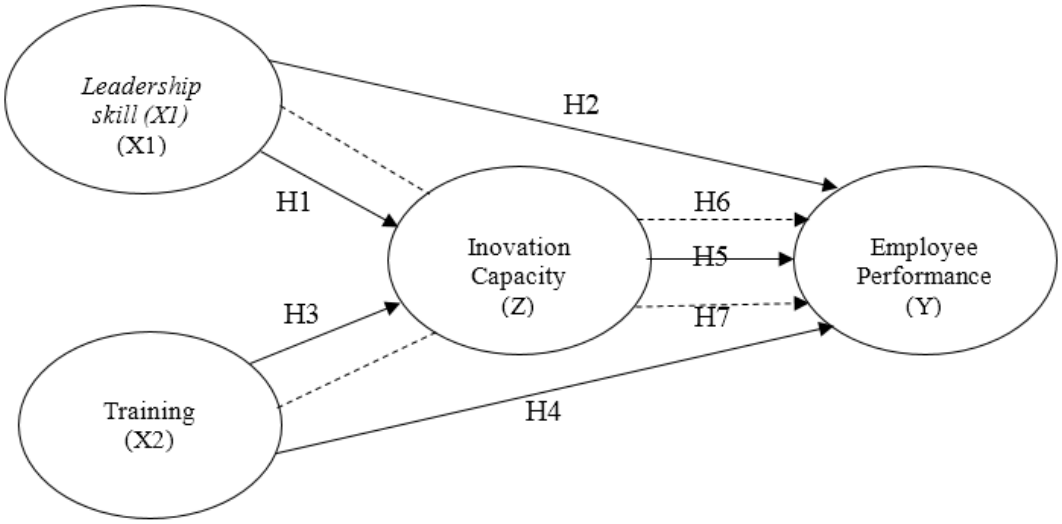

Figure 1. Innovation capacity mediation model

Description: P1 ⟶ P2 ⇢

Leadership skills, training, and innovation capacity can directly affect employee performance (P.1). *Leadership skills* and exercise can also indirectly affect employee performance through the mediation of innovation capacity (P.2).

Research Hypothesis

Based on the problems and theoretical studies above, the following research hypotheses can be proposed:

H_1: There is a direct influence of *leadership skills* on innovation capacity.

H_2: There is a direct influence of *leadership skills* on employee performance.

H_3: There is an immediate effect of training on innovation capacity.

H_4: There is a direct effect of exercise on employee performance.

H_5: There is a direct effect of innovation capacity on employee performance.

H_6: There is an indirect effect of *leadership skills* on employee performance through mediating innovation capacity.

H_7: There is an indirect effect of training on employee performance through innovation capacity.

Research design

This study uses an employee behavior approach to analyze the mediation of innovation capacity (Z) and examines the *Leadership Skills* (X1) variable, Training (X2), on employee performance (Y). The research respondents came from employees who worked at PT Fortuna Inti Talent and PT Maruni Daya Sakti. The researcher uses the *Structural Equation Model* (SEM) method to analyze the optimization of the significance analysis of the effect of the independent variable (X) on the dependent variable (Y) and the significance of the impact of the mediating variable (Z) on the dependent variable.

Research sample

Researchers set the number of samples following the minimum number of indicators of 280 respondents and the maximum number of 560 respondents. The author decided to use a minimum sample size of 280 models. Due to the location of the study, there were two companies, and the number of samples was then divided by two so that from PT. Fortuna Inti Talenta has as many as 140 respondents and PT. Maruni Daya Sakti has as many as 140 respondents.

Data source

Source data obtained directl y from respondents through questionnaires, usually in the form of opinion subjects by individual or group, results from observation of something object,activity, or events arranged in the form of statements or questions related to indicators of research variables, including *leadership skills*, training, innovation capacity, and employee performance. In addition, secondary data, namely data sources obtained from several works of literature,like books, journals, magazines, social media, websites, and other relevant information still relevant to this research.

Data analysis method

Descriptive statistics

Descriptive statistical analysis provides an overview or description of data seen from the average value *(mean)*, standard deviation, variance, maximum, minimum, *sum, range, kurtosis,* and *skewness* of distribution skewness. Descriptive statistics in this study are used to analyze the respondents' demographic factors. Characteristics or backgrounds of respondents that will be described in this study are gender, age, length of work, and last education. Descriptive statistics are statistics used to analyze data by describing or describing the data that has been collected as it is without intending to make conclusions that apply to the public or generalizations.

Six stages we r e conducted in the process of descriptive analysis, which is described as follows:

a. Classify alternative answers on every variable using scale ordinal as a description answer rating;
b. Sum up the score from t h e whole indicator variable so that get n total the score of the variable;
c. Count average from score total every variable;

d. I calculated the magnitude of the variable level with the total number of answer scores variable (score current) compared with the highest score, which was multiplied by the number of respondents (ideal score).

e Calculate the percentage of the total score of the variable using the formula as follows:

$$\%\ skor\ aktual = \frac{skor\ aktual}{skor\ ideal}\ x\ 100\%$$

f. Interpret results percentage total score which has got use criteria percentage score response, respondent

Inferential Statistical Analysis

Structural Equation Modeling (SEM) is a method used to cover the weaknesses found in the regression method. According to experts, the *Structural Equation Modeling* (SEM) research method is grouped into two approaches, namely the *Covariance Based SEM (CBSEM)* and *Variance Based SEM* or *Partial Least Square* (PLS) approach. *Partial Least Square is a powerful* analytical method based on only a few assumptions. The PLS (*Partial Least Square) the approach is distribution-free* (does not assume certain data and can be nominal, category, ordinal, interval, and ratio) (Ghozali, 2014). (*Partial Least Square)* PLS uses the *bootstrapping method* or random doubling where the assumption of normality will not be a problem for (*Partial Least Square)* PLS. In addition, (*Partial Least Square)* PLS does not require a minimum number of samples to be used in the study. Research with a small selection can still use (*Partial Least Square)* PLS. *Partial Least Square* is classified as a non-parametric type. Therefore, in PLS modeling, data with a normal distribution is not needed (Husein, 2015).

The purpose of using PLS (*Partial Least Square)* is to make predictions. Making these predictions is to predict the relationship between constructs, in addition to helping researchers in their research to get the value of the latent variable that aims to make predictions. The latent variable is the *linear aggregate* of the indicators. *The weight estimate* for creating the component score for the latent variable is obtained based on how *the inner model* (structural model that connects latent variables) and *outer model* (measurement model, namely the relationship between indicators and their constructs) is specified. The result is that the *residual variance* of the dependent variable (both latent and indicator variables) is minimized (Ghozali, 2014).

The parameter estimates obtained by PLS (*Partial Least Square) (see Figure 2)* can be categorized as follows: The first category is the *weight estimate* used to create the latent variable score. The second reflects the *path estimate* that connects the latent variables and between latent variables and their indicator blocks (*loading)*. Finally, the third category relates to the *means* and location of parameters (constant regression values) for indicators and latent variables. To obtain these three estimates, PLS (*Partial Least Square)* uses a three-stage iteration process and, in each stage, produces an estimate, which is as follows:

1. Generate *weight estimates.*
2. Generates estimates for *the inner model* and *outer model.*
3. Generate *means* and location estimates (constant) (Ghozali, 2014).

The analysis technique in this study uses the PLS technique, which is conducted with two Step, that is:

1. Stage first is to test *measurement models*, that is, test validity and reliability construct from each indicator.
2. Stage second is to test *the structural model*, whichaims to know whether or not there is an influence between variable/correlation Among construct, which is measured with the use t-test from that PLS alone.

Research result

By utilizing Partial Least Square (PLS), a Multivariate Analysis in the second generation using structural equation modeling (Structural Equation Model / SEM). There are two group stages in the analysis of the SEM-PLS, namely the analysis of the measurement model (Outer Model) and the study of the structural model (Inner Model) (Julian, 2018).

Testing *Outer Model*

Analysis *outer model* defines how every *manifest* is related to its latent variable. Tests performed on *the external model*, among others, are:

1. *Convergent Validity*. The value of *convergent validity* is the value of the *loading factor on the latent* variable with its manifest. The expected value exceeds number > 0.7. or often used limit 0.6 as the minimum limit of the *loading value factor*.
2. *Discriminant Validity*. Score this *cross-loading* useful *factor* for knowing if the construct has adequate discriminant. By comparing the *loading value* on the construct, the destination must be greater than the *loading value* with that construct other.
3. *Average Variance Extracted* (AVE). AVE. The matter is> 0.5, which is said to have a good *discriminant validity* value.
4. *Composite Reliability*. Data that have *composite reliability* > 0.7have tall reliability.
5. *Cronbach Alpha*. Test reliability strengthened with *Cronbach Alpha*. Scoreexpected more than number > 0.6 for all construct.

***Convergent Validity* Test Results**

The convergent validity of *the measurement model* with a reflective manifest can be seen from the correlation between item/indicator *scores and* construct *scores. In the Convergent Validity* test, the *loading factor value is used*. Individual indicators are considered reliable if they have a correlation

value above 0.70. However, in the research development stage of the loading scale, 0.5 to 0.6 is still acceptable

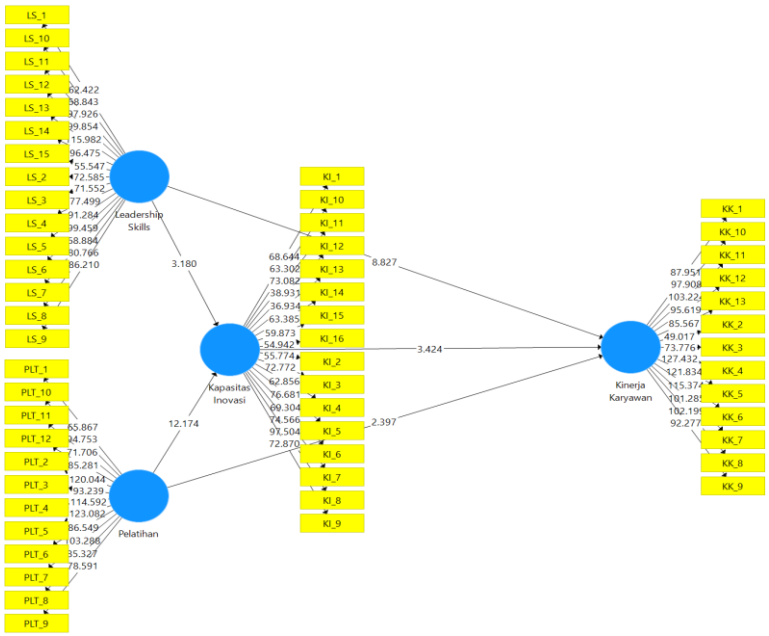

Figure 2 *PLS Algorithm*

Hypothesis testing

The significance value of the acceptance of a hypothesis is measured by looking at the P-Values. For example, the research hypothesis can be accepted if the P-Values <0.05. The P-value in SmartPLS is carried out through a *bootstrapping process* on a valid and reliable model that meets the model's feasibility. After the *bootstrapping process has been carried out* on the measurement model, the results of hypothesis testing are obtained as follows:

a. H_1: There is a significant influence of *leadership skills* on innovation capacity

From the results of the path coefficient obtained between *leadership skills* on the innovation capacity of 0.200 with a *P-Value of* 0.002 <0.05, it is concluded that there is a significant direct influence between *leadership skills* on innovation capacity. A positive value in the parameter coefficient means that the higher the *leadership skills* of the company's leadership, the higher the innovation capacity of the employees. Then H1 is accepted.

b. H_2: There is a significant influence of *leadership skills* on employee performance

From the results of the path coefficient obtained between *leadership skills* on employee performance of 0.559 with a *P-Value value of* 0.000 <0.05, it is concluded that there is a significant direct influence between *leadership skills* on employee performance. A positive value in the parameter coefficient means the higher the level of *leadership skills* than the leadership of the company, the better the employee's performance. Then H2 is accepted.

c. H_3: There is a significant effect of training on innovation capacity

From the results of the path coefficient obtained between training on the innovation capacity of 0.753 with a *P-Value value of* 0.000 <0.05, it is concluded that there is a significant direct effect between training on innovation capacity. A positive value in the parameter coefficient means that the more training employees receive, the higher the innovation capacity will be, so H3 is accepted.

d. H_4: There is a significant effect of training on employee performance

From the results of the path coefficient obtained between training on employee performance of 0.191 with a *P-Value value of* 0.017 <0.05, it is concluded that there is a significant direct effect between training on employee performance. A positive value in the parameter coefficient means that the more employee activity is carried out, the employee's performance will increase, so H4 is accepted.

e. H_5: There is a significant effect of innovation capacity on employee performance

From the path coefficient results obtained between innovation capacity and employee performance of 0.217 with a *P-Value of* 0.001 <0.05, it can conclude that innovation capacity has a significant direct effect on employee performance. Therefore, the positive value of the parameter coefficient means that the higher the level of the innovation capacity of the employees, the higher the concert will be, so H5 is accepted.

Mediation Effect Test

The mediation effect test was conducted to see the relationship between the independent and dependent variables through the mediating or connecting variable.

This test is carried out when it is suspected that there are intervening variables between the independent and dependent variables. It means that the influence of the independent variable on the dependent variable does not occur directly but through a transformation process represented by the mediating variable.

Table 1

Specific Indirect Effect

	Original Sample (O)	**T Statistics (|O/STDEV|)**	**P Values**
Leadership Skills -> Innovation Capacity -> Employee Performance	0.043	2.189	**0.029**
Training -> Innovation Capacity -> Employee Performance	0.163	3.330	**0.001**

Furthermore, to find out the mediation function, the researcher uses the *bootstrapping method for specific indirect effects* tables whose results are listed in table 4.15. According to Hair *et al.* (2017:

239), the bootstrapping process is carried out because the Sobel test assumes a normal distribution inconsistent with the nonparametric SEM-PLS method. In addition, the parametric assumptions of the Sobel test usually do not apply to the indirect effect because the product of two normally distributed coefficients results in an abnormal distribution. Furthermore, the Sobel test requires non-standard path coefficients as input for statistical tests and has no statistical power, especially when applied to small sample sizes. For this reason, the study did not use the Sobel test to evaluate mediation analyses, especially in SEM-PLS studies.

a. **H6: There is a significant influence of *leadership skills* on employee performance through mediating innovation capacity.**

   From the *specific indirect effect test*, it is known that *leadership skills* have a positive and significant effect on employee performance through innovation capacity where the P-Values value is 0.029 < 0.05 (significance alpha 5%). The results of the direct relationship of *leadership skills* with employee performance are also significant with P-Value 0.000 <0.05 (significance alpha 5%). Thus, it can conclude that this mediation is only *partial* (*partially mediating*) with the category of *complementary partial mediation*, so H6 is accepted.

b. H7: There is a significant effect of training on employee performance through the mediation of innovation capacity

   From the *specific indirect effect test*, it is known that training positively affects employee performance through innovation capacity where the P-Values value is 0.001 < 0.05 (significance alpha 5%). Furthermore, the results of the direct relationship between training and employee performance are also significant with P-Value 0.017 <0.05 (significance alpha 5%). As a result, it is possible to conclude that this mediation is only partial (partially mediating) and falls under the category of complementary partial mediation; consequently, Hypothesis 7 is validated.

REFERENCES

Agbanusi, A. (2021). Socialscientia Journal of the Social Sciences and Humanities Nigerian Economy, Leadership Factor and National Development: A Study in Hermeneutics. *Socialscientia*, *6* (3), 75–82.

Asmuri, s. N., grade, m., razaob, n. A., chai, s. C., Mohd rasdi, h. F., & arifin, n. SA (2021). Cultural Adaptation and Validation of the Performance Assessment of Self-care Skills among Older People in Community. *Malaysian Journal of Health Sciences*, *19* (02), 123–133. https://doi.org/10.17576/jskm-2021-1902-14

Atatsi, EA, Stoffers, J., & Kil, A. (2019). Factors affecting employee performance: a systematic literature review. *Journal of Advances in Management Research*, *16* (3), 329–351. https://doi.org/10.1108/JAMR-06-2018-0052

Beauchamp, G., Hulme, M., Clarke, L., Hamilton, L., & Harvey, JA (2021). 'People miss people': A

study of school leadership and management in the four nations of the United Kingdom in the early stage of the COVID-19 pandemic. *Educational Management Administration and Leadership, 49* (3), 375–392. https://doi.org/10.1177/1741143220987841

Gümüş, S., Bellibaş, M. ., Gümüş, E., & Hallinger, P. (2020). Science mapping research on educational leadership and management in Turkey: a bibliometric review of international publications. *School Leadership and Management*, *40* (1), 23–44. https://doi.org/10.1080/1632434.2019.1578737

Hammond, H., & Churchill, RQ (2018). the Role of Employee Training and Development in Achieving Organizational Objectives: a Study of Accra Technical University. *Archives of Business Research, 6* (2), 67–74. https://doi.org/10.14738/abr.62.4190

Kobicheva, A. (2021). A virtual project is a tool for leadership skills development. *E3S Web of Conferences*, *284*, 09019. https://doi.org/10.1051/e3sconf/202128409019

Paais, M., & Pattiruhu, JR (2020). Effect of Motivation, Leadership, and Organizational Culture on Satisfaction and Employee Performance. *Journal of Asian Finance, Economics, and Business*, *7* (8), 577–588. https://doi.org/10.13106/JAFEB.2020.VOL7.NO8.577

Sakr, F., Haddad, C., Zeenny, RM, Sacre, H., Akel, M., Iskandar, K., Hajj, A., & Salameh, P. (2022). Work Ethics and Ethical Attitudes among Healthcare Professionals: The Role of Leadership Skills in Determining Ethics Construct and Professional Behaviors. *Healthcare*, *10* (8). https://doi.org/10.3390/healthcare10081399

Urbancová, H., Vrabcová, P., Hudáková, M., & Petrů, GJ (2021). Effective training evaluation: The role of factors influencing the evaluation of employee training and development effectiveness. *Sustainability (Switzerland)*, *13* (5), 1–14. https://doi.org/10.3390/su13052721