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## **Influence of Leadership, Intellectual Ability, and Work Environment on Employee Performance**

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### **Abstract**

The study tested the variables of leadership, intellectual ability, and work environment on employee performance at the Tanah Jawa District Office, Simalungun Regency, North Sumatra, with a total of 32 employees. This research uses quantitative and qualitative methods. The results showed that the questionnaire data instrument items were stated to be valid and reliable. The regression equation produces a positive correlation between leadership, intellectual ability, and work environment variables on employee performance with work environment variables having the greatest relationship to employee performance. Partially (the t-test) shows that leadership has a significant effect on employee performance, intellectual ability has a significant effect on employee performance, and work environment has a significant effect on employee performance. Simultaneously the variables of leadership, intellectual ability, and work environment have a positive and significant effect on performance. This shows that leadership, intellectual ability, and work environment if they work well in an organization and can become a support for employees will have a positive impact on employee performance.

**Keywords:** Leadership, Intellectual Ability, Work environment, Employee Performance

### **Introduction**

The life of an organization cannot be separated from the ability of human resources which are an important asset for the organization, because all goals must be achieved with humans (Pamungkas & Agus Purnomo Sidi, 2022). The ability of human resources can be obtained through good performance from employees because organizational progress depends on the performance of its members, this is done through a management arrangement of human resources. Performance is the result of being carried out and being able to contribute to the organization (Hoang et al., 2022) both positively and negatively so that organizational activities run smoothly, good performance is needed, the key performance of an organization. Besides that, the intellectual abilities of employees and working conditions are parameters of the progress of an organization. (Kauppila et al., 2022)

Performance is a very important aspect of the organization because it has an important influence on achieving goals, the effectiveness and efficiency of performance reflect a productive organization, then being able to overcome problems that occur so that goals can be achieved. Achieved, Performance is often said to be the effort or results that are owned by members of the organization, performance much needed by the company, performance is often also associated with the achievement of tasks that require very important considerations, performance cannot depend on past performance, the success of the company is strongly influenced by the performance of its employees. The performance involves the quality of input and output, attendance at work, accommodative attitude, helping for punctuality. Organizations can use bonuses and awards directly if the individual employee's performance is visible, performance can be the result of work achieved by a person according to their respective duties and authorities (Kazmi & Javaid, 2022).

The performance of employees of the Tanah Jawa District Office, Simalungun Regency is regulated following (Regulation Government Number 30 Concerning Civil Servant Performance Evaluation, 2019) which the employee performance appraisal component is about Employee Performance Targets (SKP) where the measuring elements consist of quantity, quality, time and cost, then for Work Behavior (PK), the measurement tools are service orientation, integrity, commitment, work initiative, cooperation, and leadership. However, in reality, the employee's performance is still not in line with expectations, this can be seen that there are still employees who often delay work and are not serious at work, besides that, there are still employees who do not complete tasks and are less responsible for the work given. The phenomenon of performance that is not optimal is the impact on organizational goals that are not optimal as expected (Alqudah et al., 2022).

Good employee performance can be influenced by leadership factors that exist in the organization (Ahmad et al., 2022). Leadership can be said to be one of the spearheads of organizational life, and becomes a dynamic in supporting employees or work teams to achieve common goals, with processes in controlling subordinates and to find out as well as obeying how tasks are carried out selectively, leadership as a development agent that involves groups in decision making, then leaders can assess employees by speaking or remaining silent (Mursyidi, 2022). Leadership can be seen from various conditions including social, cognitive, and emotional intelligence, leadership is one of the main things in determining the success and failure of an organization (Crucke et al., 2022), and is very important in realizing the vision and mission, the process of setting goals, designing a strategy, policy, design, and methods to achieve organizational goals effectively and efficiently, and also carry out a very vital role in the organization, leaders must be brave in taking risks, have strong leadership skills and charisma (Malik & Santoso, 2022).

## **Literatur Review**

Abdurrahman in, argues that leaders must be brave and firm in making decisions, then Jusuf Kala says that leaders should also have different communication styles (Rahmawaty et al., 2021). The problem found is that leaders do not manage effectively directly incoming information so that the information conveyed to its members is unclear regarding roles and responsibilities, this will disrupt the course of the work process of the organization because the

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behavior of the right leadership will encourage employees to be more active in doing their jobs (Pio, 2022).

Performance can also be influenced by intellectual abilities, intellectual abilities can be seen as one of the most valuable attributes for employees (Prasetyo, Endarti, et al., 2021), abilities will determine the level of achievement of a person and form the basis of abilities related to satisfaction whether or not a person is towards his work, because performance can be a function of ability (Prasetyo, Aliyyah, et al., 2021). Intellectual ability can be a general capacity of awareness to think, abilities will support capabilities or skills and become important for work performance, because when a person can do the work assigned to him, then that person will produce a good performance because his knowledge is following the workload assigned to him given to him (Lu & Smith, 2022).

Developing the capabilities of employees, cannot be separated from several personal potentials of an employee. The phenomenon that occurs is that the intellectual abilities of employees are not in line with expectations (Virgiawan et al., 2021), because employees have not been able to master the use of technology, and there is still standard communication between employees. This means that the intellectual abilities of employees are still not able to support the work processes expected by the organization. In addition to leadership and intellectual abilities, the work environment can also affect employee performance, because optimal performance is needed in a good environment, a conducive work environment will help employees automatically increase productivity (Alqudah et al., 2022).

The work environment is in the form of physical and non-physical, because a good physical and non-physical work environment indicates that a conducive work environment has been created and creates feelings of joy and satisfaction if the environmental conditions are good then employees feel satisfied and performance is easy to achieve. According to, the quality of the workspace can affect employee attitudes and increase their productivity. When communication can go well, productivity will increase and complaints will be few to find, but the work environment is not optimal, it can be seen that the working space is close to the main road so it is uncomfortable and noisy, then the facilities are not optimal so that the work process becomes slow, if this is allowed then organizational goals will be difficult to achieve (Sabir et al., 2022).

## **Research Method**

This research was conducted in February 2022, at the Tanah Jawa District Office, Simalungun district, North Sumatra. This type of research uses quantitative and qualitative methods. The population in this study were all employees at the Tanah Jawa District Office, Simalungun Regency, North Sumatra, totaling 32 people employees. Thus the sample in this study amounted to 32 employees. Data analysis technique for test instrument validity with a correlation of 0.30 (Sugiono, 2019), and for data reliability (reliability) with a value limit of 0.70 for Cronbach's alpha (Eisingerich & Rubera, 2010), then do a test for data normality, test the coefficient of determination, equations with simple and multiple regression, as well as the t-test and f test used in finding answers to the hypotheses. The data source used is in the form of primary data where the data obtained is obtained directly from the respondents by distributing questionnaires and interviews with respondents then secondary data, namely data

obtained from various sources, both literature sources, literature reviews, and relevant journals in this study. Data collection techniques used a questionnaire technique. The data collection method uses a questionnaire that aims to obtain data from respondents.

## **Result and Discussion**

Based on the data above shows the respondent data for the sex of the most dominant employee is the male sex totaling 19 people (59.4%), then the respondent data based on age is dominated by ages 31-40 as many as 13 people (40.6 %) if seen from the data of respondents based on education, most of them were at the undergraduate level as many as 16 people (50%), then the respondents for working years were dominated by working years of 11-15 years (40.6%).

The data shows a value of 0.443 or 44%, which means that the variable ability of leadership, intellectual ability, and work environment in explaining employee performance variables has a value of 44%, while the remaining 56% is not discussed in this study such as motivation, organizational culture, competence, compensation, and other variables. other things that are not in this study, and for the results of the R-value (correlation) the value is 0.66 or 66% which indicates that leadership, intellectual ability, and work environment have a strong relationship with employee performance. Data show the results of the multiple regression equation used in this study, namely  $Y = 1.697 + 0.372 X_1 + 0.393 X_2 + 0.395 X_3$ , when the constant value of leadership, intellectual ability, and work environment is considered zero then the value of employee performance is 1.697. When the value of the leadership direction coefficient is 0.372, intellectual ability is 0.383 and the work environment is 0.395, it means that when the value of leadership, intellectual ability, and work environment when it becomes increased by one unit, the employee's performance will change with a value of 0.372 for leadership, intellectual ability 0.383 and 0.395 for work environment assuming the other assumptions are fixed. The results of the equation show a positive equation with the most dominant value being in the first work environment variable, and the second and last value of intellectual ability is leadership.

Data show the results for the partial test of the t-count value of the leadership variable 2.181 and the arithmetic significance of 0.03 while obtaining answers from estimates made by comparing  $t_{count} > t_{table}$  and the calculated significance value  $< \alpha$  significance 0.05. Defining the  $t_{table}$  is done through  $df(nk) = (32-2) = 2.042$ . The results found that the  $t_{count}$  was 2.181  $> t_{table}$  2.042 and the arithmetic significance value was 0.037  $<$  significance 0.05, meaning that accepting H1 as the hypothesis of this study that there is an influence of leadership on employee performance. The t-count value of the intellectual ability variable is 2.794 with a significance count of 0.009, while the t-table is determined by the value of  $df(nk) = (32-2) = 2.042$ . So the conclusion is that the  $t_{count}$  value is 2.794  $> t_{table}$  2.042 and the arithmetic significance value is 0.009  $<$  significance 0.05, which means that the H2 hypothesis is accepted that the effect of intellectual ability on employee performance. obtained through the results of  $(nk) = (32-2) = 2.042$  and the significance limit used is 0.05, the results obtained are  $t_{count}$  2.914  $> t_{table}$  2.042 and arithmetic significance value of 0.007  $<$  significance 0.05 means that accept the H3 hypothesis that there is an effect of the work environment on employee performance, this is in line with research (Liah, 2016)

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Data show the results of the F-count value of 7.419 and a significance probability value of 0.01, and the value of  $F_{table}$  is obtained by calculating  $df = nk - 1$  ( $32 - 3 - 1$ ) = 28 with a significance probability of 0.05 = 2.95, then the result is a Fcount value of  $7.419 > F_{table}$  2.95 and a significant arithmetic value of  $F_{table}$   $0.01 < \text{significance probability } 0.05$ , which means accepting  $H_4$  that there is a simultaneous influence of leadership, intellectual ability and work environment variables on employee performance. This is in line with research on leadership and intellectual abilities on performance and research on the work environment on employee performance (Abdullahi et al., 2022).

### ***Leadership influences employee performance***

The results of the study show that there is an influence of leadership on employee performance, leadership can be said to be a characteristic of the company, and it is said to be a process of influencing people to achieve the desired results. It is expected that this is a form of performance (Flugum et al., 2021), a leader is a person who can stimulate and motivate and recognize his employees in completing work and achieving the desired results, leaders must have motivated their employees to exert extra effort in achieving higher goals and leadership can better predict organizational success or failure. If the leadership used by an organization is appropriate then the employees will be enthusiastic about working, if it is not appropriate then the enthusiasm for work will decrease (Aliyyah et al., 2021).

### ***Intellectual abilities influence employee performance.***

The intellectual ability of a person can show the level of intelligence, employees who have good intellectual ability are expected to be able to produce a good performance, in line with research that ability has a positive influence on performance (Diana et al., 2021). Intellectual abilities will make individuals competent to be able to carry out their duties without a doubt to produce good performance, with good intellectual abilities, employees will be able to show all the potential that exists within them to produce a good performance for them. The organization will help achieve goals and the level of employee performance can be seen from the ability of employees to complete their tasks (Yücel, 2021).

### ***The work environment influences employee performance***

The work environment in an organization usually consists of a physical work environment and a non-physical work environment, with balanced work environment aspects, the work process will be increasingly supported by a conducive work environment so that work outcomes are optimal, a work environment that fun is very important in improving employee performance and has a very direct influence on the performance of employees in carrying out their work (Ferozi & Chang, 2021).

### ***Leadership, intellectual ability, and work environment influence employee performance***

Leadership, intellectual ability, and work environment can improve employee performance, traits leadership emerges from within a leader to influence his subordinates in achieving optimal work processes that are following organizational goals (Narayanamurthy & Tortorella, 2021), then, because leaders can be a very important point in directing good performance, a leader will have pride if its members can produce good ideas for organizational growth, because as a result of leaders not being able to lead the organization nearly 40% of professional workers leave their workplaces, therefore a proper leader is needed in the place of

work so that its members feel at home and are motivated in doing their work because in essence leadership in an organization is how leaders carry out their activities by empowering their members (Chrisanty et al., 2021).

The intellectual abilities can be in the form of smart thinking and brilliance as well as the ability to control the left and right brain and become the greatest potential of employees at work, and these abilities are related to mental abilities such as good memory, verbal comprehension, reasoning, analysis, and problem-solving which are all important elements of the skills of workers; with good intellectual abilities from members of the organization, performance can be obtained well, that performance can occur from a combination of three important factors where one of them is an ability, which in this case is the intellectual ability of members of the organization, this means that the ability intellectually, employees have a positive impact on employee performance (SAPTA et al., 2021).

Furthermore, the work environment is an important matter to pay attention to and become one of the determinants of employee performance; a good work environment, one which increases the production and performance of employees which will ultimately increase organizational effectiveness; work environment as the physical environment where employees work and affect their performance, safety, and quality of work life, although there are opinions stating that the work environment does not affect performance this is a result of an unpleasant work environment and can make performance decrease (Baig et al., 2021) (Liga febrina et al., 2021), the results of Bruce's research workplace disturbances can reduce employee productivity by 40% and cause an increase in errors by 27%. To avoid this, the organization pays attention to the work environment of its employees because employees believe that the environment is a good place to work and 90% of employees believe workplace quality can support their productivity (SISWANTO et al., 2021).

## **Conclusion**

The results of the study show that leadership, intellectual ability, and work environment has a positive influence on employee performance at the Tanah Jawa District Office, Simalungun Regency, and the results found that the work environment has the greatest influence on employees, this shows that a good work environment is needed by employees to improve their performance, then intellectual abilities as well gives effect to the second position, this means the intellectual ability of an employee when the work environment is good, the employee will be able to show all his abilities in the process of achieving good performance and this is also supported by a form of leadership that is an example for the employee.

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