The Mediating Role of Work Engagement and Job Autonomy in the relationship between Transformational Leadership, Organization Support and Employee Performance in Mining Companies in Indonesia

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Abstract
Employees act as the business' bloodstream, whereby the performance of its employees determines the success and failure of a business. Hence, it is important to understand how to improve employee performance. This study examines how transformational leadership and organizational support influence employee performance. It focuses on the importance of work engagement and job autonomy as the moderator. Partial least square regression was used to evaluate data from 172 employees. The result shows that work engagement has a full mediation impact on the relationship between transformational leadership and employee performance. It also indicates that job autonomy fully mediates the relationship between organizational support and employee performance. The study seeks to inform managers on why and how employees perform under certain circumstances. To create a more comprehensive study, future research should consider other factors that influence employee performance, such as employee training, performance appraisal, and communication, as well as job stress and motivation.

Keywords
Employee Performance, Transformational Leadership, Organizational Support, Work Engagement, Job Autonomy

1. Introduction
Employees are a company's most valuable asset since they may create or break its reputation and have a negative influence on profitability (Hobson, 2019). Employee performance, according to Vosloban (2012), has a substantial influence on a company's growth. A high-performing employee generates cost savings, innovative development ideas, and a market advantage. The importance of employee performance has motivated many studies to investigate how company manages their employee to achieve the expected performance. Several factors influencing employee performance have been identified by the researchers: leadership and organizational culture (Pujiono et al., 2020), organizational support (T. Chen et al., 2020), social exchange (Chen and Wei, 2020), workplace (Tran et al., 2020), and training (Sharma and Taneja, 2018).

According to Vosloban (2012), employee performance reflects a company's success in achieving a specific goal. This is in line with the transformational leadership strategy, which encourages subordinates to connect with the organization's aims and interests and to exceed their expectations (Buil et al., 2019). Company and employee performance have a bidirectional relationship; one affects the other and vice versa. The company must ensure that its employees understand their role and how to act in accordance with the company's vision, mission, and values (Vosloban, 2012). Similarly, employees perform better when they feel cared for, supported, and connected by their employers Eisenberger et al. (1986).
Breevaart et al. (2014) and Buil et al. (2019) revealed that transformational leadership has a significant and favorable impact on employee performance as well as a positive correlation between transformational leadership and work engagement. In terms of organizational support and job autonomy, according to Buch et al. (2014), high levels of organizational support complement job autonomy, which employees value. As a result, organizational support influences employees' positive perceptions of the organization by recognizing and caring for their engagements and well-being (Kurtessis et al., 2017).

Previous research done by Harwiki (2016) and Fuller et al. (1996) also showed that leadership significantly impacted employee performance. However, Sihombing et al. (2016) found that leadership has no substantial impact on employee performance. This is consistent with Leem (2015), who found that there is no significant evidence of a relationship between leadership and employee performance.

Due to the existence of inconsistencies in the relationship, this allows a research gap for further examination. Further research is also required to investigate the certain mechanisms for the effects to take place and the boundary circumstances, as suggested by Pan and Lin (2015), in which transformational leadership enhances employee performance. With the demand for further research, we investigate the role of mediators on work engagement. Schaufeli et al. (2006) defined work engagement as a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption.

Rhoades and Eisenberger (2002) performed a meta-analysis of over 70 researches on the relationship between organizational support and employee performance. The correlation is shown to be indirect and based on mechanisms that employees view the company's activities as discretionary, experience a feeling of obligation for the organization, meet socio-emotional needs, and perform to expectations according to organizational support theory. Chen et al. (2020), on the other hand, found that improving organizational support had a direct and positive impact on frontline worker performance. The occurrence of an uneven and ambiguous link between organizational support and employee performance also highlights a research need.

Further research is also required to address the demand for empirical data, as well as to examine the impact mechanisms and functions of organizational support on employee performance. According to Buch et al. (2014), job autonomy is greatly influenced by organizational support, supervisors, and coworkers experienced by employees. Lifshitz-Assaf et al. (2018) suggested that allowing high autonomy level increases employees' curiosity and independent thinking in their work. In turn, it is improving their performance and problem-solving approach. Thus, we propose that job autonomy be used to mediate the relationship between organizational support and employee performance.

1.1 Objectives
This research objective is to improve our understanding on how transformational leadership affects employee performance, which investigates the impact of work engagement in those relationships. We also hope to contribute to the literature on employee performance by investigating how organizational support influences employee performance and how job autonomy affects those relationships. Based on the existing literature, we construct various study hypotheses about the relationship between transformational leadership, organizational support, and employee performance. We collect data from PT Arutmin Indonesia, the third biggest coal mining company in Indonesia.

2. Literature Review
2.1 Employee Performance
The theory of employee performance, referring to individuals’ professional behavior or capability in achieving their work objectives, is mostly drawn from psychology theory (Agustia, 2006). In etymology, Masakure (2016) defines employee performance as the capacity of the organization to perform the competencies which include quality, efficiency and other related factors at work. Previous study on worker productivity has found that employees who are happy with their employment had higher job performance and, as a result, higher job retention than those who are unhappy with their positions (Landy, 1985). Furthermore, Agustia (2006) defined criteria for measuring performance such as: quantity, time allocation, position, attendance, and safety while performing professional duties. Employee performance, according to Shmailan (2016), is an activity made by workers in carrying out the organization's work. Wibowo (2013) defines employee performance as an indicator used to compare work outputs and assigned responsibilities over time. The employees' performance reflects the organization's overall performance.
Delaney and Huselid (1996) discovered that multifunctional capacities such as human, technological, organizational, and institutional levels determine employees' performance. It begins with top-level management, but results are accomplished by the lower level employees. High-performing firms have higher levels of employee satisfaction, but companies with low financial success may have a similar situation of employee contentment. According to professionals and academics, performance and outcomes are determined by the methods that businesses use in managing their personnel (Delaney and Huselid, 1996).

Furthermore, Rivai and Basri (2005) claimed that employees’ performance is determined when they meet a certain set of standards. As a result, an organization that recruits high-performing individuals will see strong results, resulting in employees' high trust in the business. Task performance, adaptable performance, and contextual performance are all components of employee performance, according to Pradhan and Jena (2017). Task performance, according to Conway (1999), requires greater cognitive ability and is helped by the technical knowledge needed to ensure job performance and the completion of multiple assignments (task knowledge), the application of technical knowledge to the successful completion of tasks with limited supervision (task skill), and a connotate ability of responding to assigned jobs that either facilitate or impede performance (task habits). Adaptive performance is linked to an employee's capacity to adapt to the job assignment in a fast-paced work environment (Park and Park, 2019). Contextual performance is an attitude that accepts additional work as a kind of volunteerism, assisting others in the completion of challenging tasks, maintaining positive spirit at work, collaborating with anyone in the team, sharing important skills and knowledge for organizational development, following the norms and regulations that have been established, and assisting in the improvement of organizational decisions (Sonnenfeld and Frese, 2002).

### 2.2 Transformational Leadership

According to Kim (2014), leaders use transformational leadership to encourage subordinates to understand organizational goals and interests and perform above expectations. Kim (2014) also mentioned that transformational leaders could alter businesses through their vision for the future and encourage employees to be responsible to achieve that goal. These leaders exhibit four distinct behaviors: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Bass, 1985). This correlates with Rafferty and Griffin (2004), who discovered that transformational leaders could drive followers' attitudes, beliefs, and values, allowing them to perform above expectations. Transformational leaders compel their followers by sharing and empowering them to achieve the shared vision. Leaders that encourage their followers to be creative by presenting fresh difficult ideas and unique problem-solving methods are known as intellectual stimulation. As a result, for effective management transformational leadership is a powerful tool for bringing about the required changes (Buil et al., 2019).

### 2.3 Transformational Leadership and Employee Performance

An indicator of a manager’s success is their capacity to create a conducive working environment, such as providing opportunities for employees to develop their potentials or motivation (Buil et al., 2019). Employee success is demonstrated by their actions, attitude, and behavior not only to improve their performance but also their staffs, co-workers, and CEO’s. Some experts explain performance as combination of work assignment, ability and motivation (Robbins and Judge, 2015); and capability of employees to fulfill their professional requirements (Simamora, 2002).

One of the most effective leadership styles is transformational leadership that encourages employees' positive in-role and extra-role behaviors (Mackenzie et al., 2001). The following study by Piccolo and Colquitt (2006), which also supported a previous study by Rafferty and Griffin (2004), discovered that there is a positive relationship between transformational leadership and employee performance. Transformational leaders, as previously said, motivate followers to think beyond their own self-interest, provide feedback, establish high-performance standards, drive creativity and innovation, and focus on the needs of their followers (Bass, 1985). Therefore, transformational leaders increase employees’ performance. Hence, the following is proposed:

H1. Transformational leadership has a positive effect on employee performance.

### 2.4 Organizational Support

Organizational support, according to Rhoades and Eisenberger (2002), refers to the organization's promptness in rewarding increased work effort and meeting employees' socio-emotional needs, which influence employees' view of how they are appreciated cared for. A positive reciprocity dynamic among personnel is a result obtained from organizational support, with employees having a positive outlook on the organization, improving their work and
efforts. Usually, employees’ performance improves when intrinsic or extrinsic incentives are provided. Therefore, organizational support results in employee’s better performance and lower absenteeism (Rhoades and Eisenberger, 2002). Within organizations, employees perform better when they experience organizational care, support, and attachment. The perceived organizational support is enhanced when employees are cared for by companies (Eisenberger et al., 1986).

2.5 Organizational Support and Employee Performance
Employee performance improves organizational activities' overall efficiency and productivity and is referred to as how effective and efficient an employee performs the tasks and activities. Managers can evaluate employee performance in a variety of ways. Furthermore, monetary and non-monetary benefits, development programs, organizational support for career development (OSCD), supervisory help, and capacity building efforts all have an influence on employee performance (Saleem and Amin, 2013).

Eisenberger et al. (1986) were the first to investigate the impact of organizational support on employee performance. Many empirical researches have indicated that the organization motivates employees to be more productive in order to recompense the organization, indicating that organizational support has a substantial influence on performance (Zhong et al., 2015). Similarly, Cullen et al. (2014) discovered that organizational support could substantially affect employee performance within a rapidly changing organizational setting. Therefore, we propose:

H2: There is a positive relationship between organizational Support and employee performance.

2.6 The Mediating Role of Work Engagement
Work engagement, according to Schaufeli et al. (2006), comprises of vigor, dedication, and absorption. Employees with vigor have a lot of energy and can work for long periods of time. At work, dedication involves a sense of significance, enthusiasm, inspiration, pride, and challenge. Absorption is defined as being fully concentrated and deeply engrossed in one’s work, whereby time passes quickly, and one has difficulties with detaching oneself from work. According to (Buil et al. (2019), transformational leadership positively influences work engagement. To compensate for these actions, employees feel obligated to increase their engagement levels. A previous empirical study by Breevaart et al. (2014) supports this relationship. Thus, we propose:

H3: Work engagement mediates the relationship between transformational leadership and employee performance.

Employees who commit their time and energy to their jobs help the organization achieve its objectives (Rich et al., 2010). According to Saks (2006), employees will have greater trust toward their organization and better relationships with their superiors when they are engaged. Hence, these employees are more inclined to engage in their work by exuding more effort and behaviors than their required job descriptions (Rich et al., 2010). As a result, it is more probable that they will do better. Bakker et al. (2012) discovered that work engagement is positively correlated with employee performance. As a result, we propose the following:

H4: Work engagement positively affects employee performance.

2.7 The Mediating Role of Job Autonomy
Job autonomy is an important component of job design in firms, according to a recent research in human resource management (HRM), which focuses on employees’ degree of freedom in performing their tasks (Llopis and Foss, 2016). Job autonomy is defined as the freedom, independence, and flexibility that a job affords to workers in terms of scheduling work, making decisions, and selecting ways for completing tasks (Morgeson et al., 2005). The use of autonomy by employees on their work schedule to complete their assigned tasks increases their motivation and lowers the turnover rate. Efficiency and job satisfaction are also impacted when employees are given the authority in affecting the decision-making process. However, with many current researches have investigated numerous elements of autonomy, their interpretations are varied and have no systematic analysis of job autonomy's actual effect.

Employees feel more driven and accountable for their actions, have positive responses to their job, and better work results when they consider their supervisors fair and autonomy-supportive (Gillet et al., 2013). Buch et al. (2014) mentioned that high organizational support levels should complement job autonomy for employees to have a better appreciation, willingness to reciprocate the offered opportunities, and develop self-motivation for completing tasks. Employees will have a better perception of the organization if they feel appreciated and well taken care of, distributed by organizational support (Kurtessis et al., 2017). Tran et al. (2020) suggested that organizational support played an important role in developing job autonomy in a recent study. Thus, we propose:
H5: Job autonomy mediates the relationship between organizational support and employee performance.

Work scheduling, decision-making, and work practices, according to Morgeson and Humphrey (2006), are three aspects that influence workplace autonomy. High levels of autonomy allow employees to perform better in increasingly demanding work contexts like information technology, business and finance, education, and healthcare Van Yperen et al. (2016). Employees' enthusiasm in their job could be increased through job autonomy, as it allows employees to behave according to their beliefs, goals, and interests. Tran et al. (2020) suggested in their study that job autonomy positively helps employee performance. Therefore, we propose:

H6: Job autonomy positively affects employee performance.

Based on the explanation above, we develop the conceptual model as shown in Figure 1.

![Figure 1. Theoretical Framework](image)

3. Methodology
The survey in the form of an online questionnaire is conducted closely with PT Arutmin Indonesia employees to ensure minimal researcher interference. The research sampled PT Arutmin Indonesia employees who are spread into 5 mine sites and 1 coal terminal. The employees who are still in a probation period or have been working for PT Arutmin Indonesia for less than 3 months are not included in the research object since there is not enough time to sense the leadership and working environment in PT Arutmin Indonesia. In measuring the variables related to employee performance, researchers use a Likert scale consisting of 6 numbers, where the number 1 represents a statement that strongly disagrees, and number 6 states strongly agree. This questionnaire shows the respondents' perceptions of each question. Transformational leadership is assessed by adopting the previous scale which introduced by Buil et al. (2019) based on Carless et al. (2000). The Utrecht Work Engagement Scale, proposed by Schaufeli et al. (2006), is used to quantify work engagement. Organizational support is assessed following Tran et al. (2020) and Yang et al. (2018), as was proposed by Rhoades and Eisenberger (2002). Job autonomy is assessed with items from Tran et al. (2020) and Morgeson et al. (2005), as was proposed by (Hackman and Oldham, 1980). Finally, employee performance is measured with items from Pradhan and Jena (2017) scale.

4. Results
Frequency statistics revealed that the respondents comprise 31% have senior high school background, 16% diploma, and 53% graduates. The respondent's age ranges between under 25 years old 6%, 26 to 40 years old 58%, 41 to 50 years old 26% and more than 50 years old 10%. The majority of the respondents were permanent employees (79%). The work duration is 15% under 3 years, 32% between 3 to 10 years, and 52% more than 10 years. SPSS and partial least squares (PLS) were used to test the research model, particularly with the SmartPLS 3.0 software.

4.1 Validity and Reliability
To establish convergent validity, according to Henseler (2018), the following must be fulfilled: the indicator loading for each loading factor must be significant and greater than 0.60; the mean of variance extracted for each loading factor must be greater than 0.50; the Cronbach Alpha minimum value is 0.7, and the composite reliability for each
loading factor must be greater than 0.60. Table 1 shows that all item of each variable complies with convergent validity and reliability.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Item</th>
<th>Outer Loading</th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Performance</td>
<td>EP1</td>
<td>0.808</td>
<td>0.910</td>
<td>0.929</td>
<td>0.651</td>
</tr>
<tr>
<td></td>
<td>EP2</td>
<td>0.715</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EP3</td>
<td>0.834</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EP4</td>
<td>0.810</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EP5</td>
<td>0.801</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EP6</td>
<td>0.818</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EP7</td>
<td>0.854</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transformational Leadership</td>
<td>TL1</td>
<td>0.822</td>
<td>0.945</td>
<td>0.955</td>
<td>0.752</td>
</tr>
<tr>
<td></td>
<td>TL2</td>
<td>0.834</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TL3</td>
<td>0.893</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TL4</td>
<td>0.883</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TL5</td>
<td>0.878</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TL6</td>
<td>0.866</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>TL7</td>
<td>0.894</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work Engagement</td>
<td>WE1</td>
<td>0.863</td>
<td>0.940</td>
<td>0.952</td>
<td>0.769</td>
</tr>
<tr>
<td></td>
<td>WE2</td>
<td>0.829</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>WE3</td>
<td>0.919</td>
<td></td>
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<tr>
<td></td>
<td>WE4</td>
<td>0.856</td>
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</tr>
<tr>
<td></td>
<td>WE5</td>
<td>0.916</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>WE6</td>
<td>0.873</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Organizational Support</td>
<td>OS1</td>
<td>0.916</td>
<td>0.925</td>
<td>0.947</td>
<td>0.817</td>
</tr>
<tr>
<td></td>
<td>OS2</td>
<td>0.943</td>
<td></td>
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<tr>
<td></td>
<td>OS3</td>
<td>0.920</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>OS4</td>
<td>0.833</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Autonomy</td>
<td>JA1</td>
<td>0.891</td>
<td>0.800</td>
<td>0.873</td>
<td>0.698</td>
</tr>
<tr>
<td></td>
<td>JA2</td>
<td>0.757</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>JA3</td>
<td>0.852</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Any loading that was less than 0.5 was eliminated, resulting in AVE and CR values that exceeded the benchmark of 0. The coefficient of composite reliability for all variables varied from 0.873 to 0.955, indicating that the constructs have a sufficient degree of internal consistency, as recommended by Hair et al. (2017) along with Bagozzi and Yi (2012). Furthermore, all latent constructs have AVE values ranging from 0.651 to 0.817, which fits the rule of thumb that the AVE threshold value should be larger than 0.50 (Henseler, 2017).

Fornell's locker criteria and the Cross loading test are used to assess discriminant validity. The AVE construct should be larger than the total of its squared correlations, according to the Fornell-Larcker criterion (Henseler, 2018). Table 2 shows that the model has proven to have discriminant validity. Variable employee performance AVE (0.807) is higher than the squared correlations (0.515, 0.594, 0.592, and 0.789). Variable employee performance AVE (0.807) is higher than the squared correlations (0.515, 0.594, 0.592, and 0.789). Variable transformational leadership AVE (0.867) is higher than the squared correlations (0.592, 0.523, 0.714, and 0.559). Variable organizational support AVE (0.904) is higher than the squared correlations (0.594, 0.357, 0.714, and 0.616). Variable work engagement AVE (0.877) is higher than the squared correlations (0.515, 0.379, 0.616, and 0.559). Variable job autonomy AVE (0.835) is higher than the squared correlations (0.515, 0.357, 0.523, and 0.379).

<table>
<thead>
<tr>
<th>Variable</th>
<th>Employee Performance</th>
<th>Job Autonomy</th>
<th>Organizational Support</th>
<th>Transformational Leadership</th>
<th>Work Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Performance</td>
<td>0.807</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
According to Falk and Miller (1992), the $R^2$ value of 0.10 is considered adequate. Again, Cohen (1988) categorized the $R^2$ value for endogenous variables into three different criteria. He recommended that the determination value of $R^2$ with 0.02 deemed weak, $R^2$ with 0.13 considered moderate, and the value of 0.26 regarded as substantial, using the PLS-SEM path modeling approach. Furthermore, the $R^2$ was 0.689, indicating that exogenous variables such as transformational leadership, work engagement, organizational support, and job autonomy explained 68.9% of the variation in employee performance. In addition, Table 3 also shows that 12.7% of the variance in job autonomy is contributed by organizational support, and 31.3% of the variance in work engagement is contributed by transformational leadership.

**Table 3. Results of $R^2$ of Endogenous Variables**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Performance</td>
<td>0.689</td>
<td>Substantial</td>
</tr>
<tr>
<td>Job Autonomy</td>
<td>0.127</td>
<td>Moderate (Acceptable)</td>
</tr>
<tr>
<td>Work Engagement</td>
<td>0.313</td>
<td>Substantial</td>
</tr>
</tbody>
</table>

**4.2 Hypothesis testing: direct effects**

A bootstrapping nonparametric resampling approach with 5000 subsamples was used to evaluate the proposed model. Figure 2 depicts the findings of the complete structural model.
The results of the direct effect hypothesized are presented in Table 4. The bootstrapping PLS-SEM output revealed that there is no positive significant connection between transformational leadership and employee performance (\( \beta = 0.077, t = 0.940, p>0.05 \)), and between organizational support and employee performance (\( \beta = 0.086, t = 1.162, p>0.05 \)). As a result of these findings, hypotheses H1 and H2 are rejected.

Meanwhile, a positive substantial correlation between transformational leadership and work engagement is present (\( \beta = 0.559, t = 9.076, p<0.05 \)), between work engagement and employee performance (\( \beta = 0.612, t = 9.260, p<0.05 \)), between organizational support and job autonomy (\( \beta = 0.357, t = 4.940, p<0.05 \)), and between job autonomy and employee performance (\( \beta = 0.212, t = 3.606, p<0.05 \)). Thus, we accept hypotheses H3, H4, H5, and H6.

### Table 4. Summary of the Direct Effect

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Relationship</th>
<th>Path Coefficient</th>
<th>Standard Deviation</th>
<th>T Statistics</th>
<th>P Values</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>TL -&gt; EP</td>
<td>0.077</td>
<td>0.082</td>
<td>0.940</td>
<td>0.347</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H2</td>
<td>OS -&gt; EP</td>
<td>0.086</td>
<td>0.074</td>
<td>1.162</td>
<td>0.245</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H3</td>
<td>TL -&gt; WE</td>
<td>0.559</td>
<td>0.062</td>
<td>9.076</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H4</td>
<td>WE -&gt; EP</td>
<td>0.612</td>
<td>0.066</td>
<td>9.260</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H5</td>
<td>OS -&gt; JA</td>
<td>0.357</td>
<td>0.072</td>
<td>4.940</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
<td>H6</td>
<td>JA -&gt; EP</td>
<td>0.212</td>
<td>0.059</td>
<td>3.606</td>
<td>0.000</td>
<td>Supported</td>
</tr>
</tbody>
</table>

#### 4.3 Hypothesis testing: indirect effects

The indirect effect (mediation) results hypothesized in this research are presented in Table 5. Work engagement serves as a mediator between transformational leadership and employee performance (\( \beta = 0.342, t = 6.280, p<0.05 \)). While job autonomy mediates the relationship between organizational support and employee performance (\( \beta = 0.076, t = 2.670, p<0.05 \)). With the results, hypotheses H3 and H5 are accepted.

### Table 5. Summary of the In-Direct Effect

<table>
<thead>
<tr>
<th>Hypotheses</th>
<th>Relationship</th>
<th>Path Coefficient</th>
<th>Standard Deviation</th>
<th>T Statistics</th>
<th>P Values</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>H3</td>
<td>TL -&gt; WE -&gt; EP</td>
<td>0.342</td>
<td>0.055</td>
<td>6.280</td>
<td>0.000</td>
<td>Supported</td>
</tr>
<tr>
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<td>0.076</td>
<td>0.028</td>
<td>2.670</td>
<td>0.008</td>
<td>Supported</td>
</tr>
</tbody>
</table>

### 5. Discussion and Implication

This research investigates how transformational leadership and organizational support affect employee performance in the coal mining sector. In particular, the research investigates the mediating role of work engagement in the relationship between transformational leadership and employee performance as well as the mediating role of job autonomy in the relationship between organizational support and employee performance.

Transformational leadership, according to the findings, has no direct influence on employee performance. It supports previous researches by Sihombing et al. (2016) and Leem (2015), which discovered employee performance is not significantly affected by the leadership. The findings also confirm that work engagement fully mediates the relationship between transformational leadership and employee performance. It shows the importance of the variable in connecting the leadership style and employee performance. Work engagement governs the underlying mechanism of the behaviors of transformational leaders and the performance of their followers. This finding emphasizes that work engagement, which manifests as a burst of energy at work, a strong sense of pride in one's work, and enthusiasm for a job, aids managers with transformational leadership styles, such as inspiring motivation, individualized consideration, idealized influence, and intellectual stimulation, in improving employee performance.

The results also suggest that organizational support has no direct impact on employee performance. It supports the findings of Rhoades and Eisenberger (2002), who found that organizational support had little effect on employee performance. The connection between organizational support and employee performance is entirely mediated by job autonomy. This variable indicates that it is significant in relating organizational support and employee performance.
Employees' hard work and performance correlate with organizational support and their freedom on fulfilling their tasks.

There are numerous ways this research contributes to the literature. Initially, in response to demands for additional study on the various influence processes involved in transformational leadership (Buil et al., 2019; Rafferty and Griffin, 2004), this study investigates the mechanisms that underlie the relationship between transformational leadership and employee performance in the coal mining industry. This study expands on earlier results by examining the significance of work engagement.

Second, limited research is made on investigating impacts of mediation on the relationship between organizational support and employee performance. This research arrived with results that corroborate the effect of sequential mediation and expand previous study by indicating how job autonomy affects the correlation of organizational support and employee performance in the coal mining sector.

This research resulted in numerous managerial implications, providing managers a comprehensive framework for understanding how employee performance is produced. For starters, the coal mining companies would benefit more by recruiting managers with a strong transformational leadership style. As a result, leadership styles should be considered when recruiting, promoting, and training supervisors. Among other things, managers should use transformational leadership to communicate and reinforce the company's vision, mission, goals, and objectives; create supportive organizational cultures; encourage upward and downward communication; act as mentors; focus on employees' needs; and use active listening. Transformational leaders might drive people to go the extra mile and engage in discretionary behaviors by using work engagement as a vital mediator in the transformational leadership and employee performance connection in the business. As a result, managers should be aware of their own potential as transformational leaders, capable of establishing the corporate climate and culture and, ultimately, achieving organizational goals.

6. Conclusion
This study looked at the impact of transformational leadership and organizational support on employee performance, using work engagement and job autonomy as moderators at the PT Arutmin Indonesia mining sites in South Kalimantan, Indonesia. The findings indicated that transformative leadership affects employee performance only when it is accompanied by work engagement. Also, organizational support influences employee performance with job autonomy mediation. Therefore, even in a mature organization, it is important to build employee work engagement and create job autonomy to improve employee performance.

7. Limitation and Further Research
This study contains several limitations. The first limitation is that it is a cross-sectional empirical study, whereas longitudinal research might provide more insight into likely causality and a better understanding of the researched connection. Second, the variables in this study are measured based on employee replies, which may be enhanced if a dyadic method is used to analyze both managers’ and workers’ viewpoints. Third, this study focuses on coal mining firm employees in Indonesia. Third, this research focuses on workers of Indonesian coal mining companies. Future research might look at the effects of transformational leadership and organizational support on employee performance in a variety of sectors and countries. Future research could investigate additional elements that impact employee performance, such as employee training, performance appraisal, and communication, as well as job stress and motivation, to build a more thorough analysis.

References


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