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# The effect of predictor variables on employee engagement and organizational commitment and employee performance

Hengki Degrafe Linggiallo<sup>a</sup>, Sukisno S. Riadi<sup>a</sup>, Sugeng Hariyadi<sup>a</sup> and Doddy Adhimursandi<sup>a\*</sup>

<sup>a</sup>Departement of Management, Faculty of Economics and Business, Mulawarman University, Samarinda, Indonesia

#### CHRONICLE

#### ABSTRACT

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The purpose of this study was to examine and analyze the influence of personality, motivation, job satisfaction, employee engagement, organizational commitment on employee performance in PT. PLN (Persero) The Power Generation Unit of Mahakam, Indonesia. There were 167 employees participated in this survey using a saturated sample in which all populations were sampled. The research model used in this study was a structural model to test the hypotheses proposed by the SEM (Structure Equation Modeling) analysis technique using the Warp PLS 6.0 program approach. The results show that personality and job satisfaction had a positive and significant effect on employee engagement. Motivation was not significant to employee engagement. Personality and motivation were not significant to organizational commitment. Job satisfaction had positive and significant effect on organizational commitment. Personality, motivation, and job satisfaction did not have significant effect on employee performance. Employee engagement was positive and significant for organizational commitment. Employee engagement and organizational commitment were positive and significant for employee performance.

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## 1. Introduction

Electricity is something that is needed by many people, such as households, industry, business, and social. Without electricity, life will be disrupted since most activities are supported by energy so that the role of PT PLN (Persero) as a provider of electricity in Indonesia is very much needed to have an excellent performance in serving consumers. The firm must be supported by human resources with good personalities and employees with high motivation. Employees with high levels of job satisfaction, engagement, and high levels of organizational commitment to the organization. Barrick et al. (2000) and Tabak et al. (2009) revealed that conscientiousness is a valid predictor of performance, Lee and Steers (2017) stated that conscientiousness and emotional stability are strictly related to performance. Meanwhile, the phenomenon that occurs in the field often disrupts the supply of electricity to customers due to human errors where employees lack conscientiousness in carrying out their duties. Motivation is an impetus that comes from within or from outside a person to do something in achieving specific goals. Motivation is one of the keys to improve performance. Nasrulloh et al. (2020) stated that motivation affects performance. In contrast, Bright (2007) found that motivation does not affect performance. Job satisfaction is very influential for the success of an organization (Arabshahi & Arabshahi, 2014) since satisfied employees will look happy and enthusiastic at work and that they can improve performance. Sabuhari et al., (2019) and Yvonne, et al., 2014) found that job satisfaction has a significant effect on employee performance, while some others found that there is no significant relationship between job satisfaction and employee performance. Regarding employee engagement, the main essence of employee involvement in the workplace is to improve organizational performance; which is supported by research conducted by Bakker & Bal (2010). Furthermore, according to the research results of Lee and Steers (2017) committed employees will have a high tendency to be willing to produce new products through the development of creativity and innovation in their daily work, on the other hand, research by Chayomchai (2020) and Al-Fakeh, et al., (2020) believe that organizational commitment had a

E-mail address: doddy.adhimursandi@feb.unmul.ac.id (D. Adhimursandi)

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<sup>\*</sup> Corresponding author.

significant effect on employee performance. From the description above, it can be seen that some research results are not consistent between one study and another, so there is a gap for other researchers to research different places.

#### 2. Literatur review

## 2.1 Personality (X1)

Kreiner and Kinicki (2010:133) explain that personality is a combination of physical and mental that creates a stable state and forms a new identity for someone. At the same time, McShane and Glinow (2010:38) state that a personality is a form of thought, emotion, and behavior of a person that has been attached for a relatively long time in specific individuals and becomes a unique character that dissects with other individuals. Robbins and Judge (2015:81) report that personality is the total number of ways an individual acts and interacts with others. This is the dynamic organization of the psychological system in individuals that determines their unique adjustments to their environment. Robbins and Judge (2015:84) state that there are five basic dimensions (Big Five Model) that underlie all variations in human personality and are also indicators of this research, namely: 1) Extroversion, a personality dimension that describes someone who can socialize, expressive and confident. 2) Agreeableness, an individual trait that can provide comfort for others, friendly people will be easy to get along with so that it can be well received. 3) Conscientiousness, a measure of excellent reliability, people tend to be responsible, orderly, and able dependable. In contrast, individuals with low caution tend to be easily shifted, disorganized, and work results are less than satisfactory 4) Emotional stability, is a person's ability to deal with pressure from various parties. Individuals with stable emotions tend to look calm, confident, and reliable. In contrast, individuals who have low emotional stability tend to look nervous, anxious, lack of self-confidence and work results are not optimal. 5) Openness to experience, related to the individual's willingness to continue learning and produce innovative, creative, and high curiosity thinking about new things.

#### 2.2 Motivation (X2)

Motivation can be explained as a condition that occurs to someone that involves a relationship of attitudes, needs, and perceptions that affect one's decision making. There are two forms of motivation in a person, namely: 1) intrinsic motivation, which is related to personality, attitudes, life experiences, education, ideas, or everything that comes from within a person that makes the person moved to do something. 2) extrinsic motivation, something that comes from outside someone who makes that person motivated to do something like the role of a leader, the role of parents, the role of coworkers, regulations, and the environment. Schermerhorn et al. (2002:160) explain that motivation refers to the strength in a person to do something according to a certain level and direction and involves high enthusiasm and persistence to achieve a goal at work with various possibilities for the selection of specific alternatives. Persistence here is an effort to continuously try until the goal is reached and do not know surrender. According to Robbins and Judge (2015:127), motivation is not only about working hard, but motivation also reflects the perspective of one's abilities. Abraham H. Maslow put forward the hierarchy of needs theory as follows: 1) Physiological needs are the most basic needs that must be met by an individual. These needs include clothing, food, and shelter. 2) Safety and security needs are needs that are obtained after the fundamental needs are met. In this second stage of the needs of an individual wants the fulfillment of a sense of security for their needs, such as efforts to set aside salaries every month, the existence of pension guarantees, insurance, and guaranteed security. 3) Social needs are needs that involve one's feelings, such as love, affection, and a happy family. Social needs here show someone who needs recognition or respect from others. 4) Esteem needs are a person's need to be respected at work, valued because of achievement, loyalty, seniority, and self-actualization. 5) Self-actualization needs are the highest needs in Maslow's theory. At this stage, a person wants to fulfill his desire for self-actualization; that is, he wants to use his potential and actualize it in the form of selfdevelopment.

# 2.3 Job Satisfaction (X3)

Job satisfaction is a feeling experienced by someone about the work they do and can be decisive in increasing optimal work results in an organization. When someone feels satisfied at work, he/she will make every effort possible with all the ability he has to complete to his/her work assignments. Thus, the productivity of his work will increase to the maximum. Newstrom (2007:204) states that job satisfaction is a form of feeling related to someone happy or not happy to see the results of their work. Job satisfaction is a person's affective attitude seen from the feeling of relative likes or dislikes towards something. There is a feeling related to work, the satisfaction that is very different from the other two elements of employee attitudes. Colquitt et al., (2011:114) explained that job satisfaction is a depiction of someone about their work, whether the job is fun or not pleasant so that it can make people feel satisfied and can also cause dissatisfaction. According to Colquitt et al., (2011:107) job satisfaction is divided into several categories, namely: a) pay satisfaction is the level of employee satisfaction with the amount of salary received at work when compared to the workload received; if the workload is higher, it will undoubtedly cause dissatisfaction with the salary amount. b) promotion satisfaction, related to whether the promotion is conducted fairly, openly, and transparently which involves all employees to participate in it by existing rules. c) supervision satisfaction, describes the feelings of employees related to superiors at work whether respecting subordinates, communicative, can be invited to work together, accept criticism, and have responsible leadership. d) coworker satisfaction reflects the feelings of workers towards coworkers whether their coworkers are friendly, communicative, respectful of others, like to joke, can be relied on, like to help, and actively involved in the team. e) satisfaction with the work itself, related to the feelings of workers towards their tasks and work, whether the work is exciting, full of challenges, not dull, gives pride, and can be done with full appreciation.

## 2.4 Employee Engagement (Y1)

Employee engagement is a way for someone to be directly involved in work that involves physical, cognitive, and emotional in doing a task at work. This involvement gives the highest positive feeling statement in work and organizational relationship that is indicated by an extra effort at work, enthusiastic, enterprising, and passionate. Involvement can also mean someone's satisfaction and enthusiasm in working to produce extra effort at work. According to Schaufeli, *et al.*, (2002, 2006) that there are three dimensions in employee engagement, including 1) Vigor, which is a characteristic of employees with high energy levels and mental toughness when working, as well as a desire to give the best effort to work and also endurance in facing trouble. Vigor can also be assessed through statements that refer to high enthusiasm and persistence, try-hard, not easily give up and keep trying until the goal is achieved. 2) Dedication is a characteristic of employees with a sense of enthusiasm, inspiration, pride, and challenges. Dedication can also be measured through statements that refer to significance in work, a sense of enthusiasm and pride in the work, and a sense of inspiration and challenge by the work he does. 3) Absorption is a characteristic of employees with full concentration in work and happy when involved in work, so that time will seem to dash. Absorption can also be measured through statements that refer to totality, pleasure at work, and challenging to get away from work so that time passes quickly. The indicators of employee engagement according to Shaufeli and Bakker (2002) are: 1) feeling full of energy, 2) being able to work for a long time, 3) inspiring work, 4) enthusiastic about work, 5) proud of work, 6) fast time passed when working, 7) trying to get away from work.

#### 2.5 Organizational Commitment (Y2)

Organizational commitment is related to the level of employee participation in an organization, which then decides to remain and be loyal to the organization. Greenberg and Baron (2003: 160) state that organizational commitment is a level where individuals identify and engage with their organizations and do not want to leave, another opinion from Schermerhorn *et al.*, (2010:72) states that organizational commitment is a level of loyalty that is felt by individuals towards the organization. There are several dimensions of organizational commitment Luthans (2011:148), namely: a) Affective Commitment, related to the decision of an attacker to remain in the organization because of a deep emotional connection with the organization, b) Continuance Commitment, regarding commitment based on losses relating to the discharge of employees from the organization. If you remain in the organization, the employee will still get cost-based such as salary, benefits, and promotions. c) Normative commitment, related to the employee's decision to remain in an organization because it has become his obligation. The indicator variables of organizational commitment expressed by Allen & Meyer (1990 are: 1) Career at the company, 2) Emotionally bound, 3) Difficult to leave the company, 4) Loyal to the organization, 5) The company has contributed a lot.

# 2.6 Employee Performance (Y3)

Employee performance is an effort made by employees in the workplace that can have a good or adverse effect on the achievement of organizational goals and targets. According to Ivancevich and Konopaske (2013:265), there are several dimensions of employee performance, namely: 1) Quantity of work is the amount of work that can be done by employees at work in specific periods. 2) Quality of work is related to accuracy, neatness, and accuracy of employee work, 3) Knowledge of job is related to the existence of clear employee understanding of facts or factors related to work, 4) Personal Qualities related to personality, appearance, sociability, leadership, and integrity, 5) Cooperation is the willingness and ability of employees to work together with colleagues in carrying out a task to achieve a common goal, 6) Dependability related to timeliness in carrying out an activity, 7) Initiative relates to initiatives carried out by employees in doing something related to work.

## 3. Conceptual framework

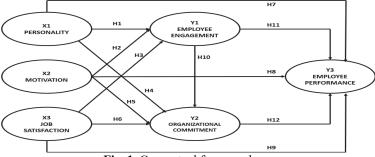


Fig. 1. Conceptual framework

Based on the problem formulation, theoretical study, previous research, and conceptual framework, the following hypotheses are proposed:

- 1) Personality has a significant effect on employee engagement.
- 2) Motivation has a significant effect on employee engagement.

- 3) Job satisfaction has a significant effect on employee engagement.
- 4) Personality has a significant effect on organizational commitment.
- 5) Motivation has a significant effect on organizational commitment.
- 6) Job satisfaction has a significant effect on organizational commitment.
- 7) Personality has a significant effect on employee performance.
- 8) Motivation has a significant effect on employee performance.
- 9) Job satisfaction has a significant effect on employee performance.
- 10) Employee engagement has a significant effect on organizational commitment.
- 11) Employee engagement has a significant effect on employee performance.
- 12) Organizational commitment has a significant effect on employee performance.

#### 4. Methodology

The research was conducted in PT. PLN (Persero) The Power Generation Unit of Mahakam (UPDK). In this research, we used a saturated sample as a sampling technique in which all 167 members of the population were sampled. Data collected through questionnaires, namely by asking several questions to the appropriate respondents with research purposes. This research instrument uses a Likert measurement scale where the measured variable was explained in several indicator variables where the indicator variable will later become a reference in compiling instrument items, which can be questions and statements. This research uses Structural Equation Modeling (SEM) approach with Warp PLS 6.0 computer software.

## 5. Results

In this study, there are several groupings of respondents based on the criteria of gender, age, education, and length of work.

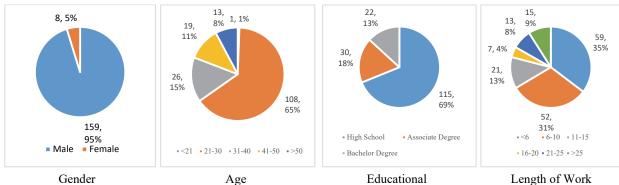


Fig. 2. Personal characteristics of the participants

Fig. 2 shows that based on gender the majority of respondents were (95%). In terms of the age, the majority of respondents aged from 21 to 30 (64%). In terms of education, the majority of respondents were involved in high school (68%), In terms of the length of work, the majority of respondents working under six years (35%) followed by working for 6 to 10 years (31%).

#### 5.1 Convergent Validity

**Table 2**The test result of convergent validity

Variable	Indicator	Factor Loading	P-value	Remarks
Personality	$X_{1.1}$	0.532	< 0.001	Valid
	$X_{1.2}$	0.718	< 0.001	Valid
	$X_{1.3}$	0.797	< 0.001	Valid
	$X_{1.4}$	0.692	< 0.001	Valid
	X <sub>1.5</sub>	0.746	< 0.001	Valid
Motivation	$X_{2.1}$	0.818	< 0.001	Valid
	$X_{2.2}$	0.844	< 0.001	Valid
	$X_{2.3}$	0.693	< 0.001	Valid
	$X_{2.4}$	0.880	< 0.001	Valid
	$X_{2.5}$	0.805	< 0.001	Valid
Job Satisfaction	X <sub>3.1</sub>	0.747	< 0.001	Valid
	$X_{3.2}$	0.806	< 0.001	Valid
	X <sub>3.3</sub>	0.818	< 0.001	Valid
	X <sub>3.4</sub>	0.454	< 0.001	Valid
	$X_{3.5}$	0.792	< 0.001	Valid

 Table 2

 The test result of convergent validity (Continued)

Variable	Indicator	Factor Loading	P-value	Remarks
Employee Engagement	Y <sub>1.1</sub>	0.791	< 0.001	Valid
	Y <sub>1.2</sub>	0.757	< 0.001	Valid
	Y <sub>1.3</sub>	0.750	< 0.001	Valid
	Y <sub>1.4</sub>	0.780	< 0.001	Valid
	Y <sub>1.5</sub>	0.758	< 0.001	Valid
	Y <sub>1.6</sub>	0.653	< 0.001	Valid
	Y <sub>1.7</sub>	0.682	< 0.001	Valid
Organizational Commit-	Y <sub>2.1</sub>	0.777	< 0.001	Valid
ment	$Y_{2.2}$	0.822	< 0.001	Valid
	$Y_{2.3}$	0.694	< 0.001	Valid
	$Y_{2.4}$	0.826	< 0.001	Valid
	Y <sub>2.5</sub>	0.783	< 0.001	Valid
Employee Performance	Y <sub>3.1</sub>	0.755	< 0.001	Valid
	Y <sub>3.2</sub>	0.648	< 0.001	Valid
	Y <sub>3.3</sub>	0.647	< 0.001	Valid
	Y <sub>3.4</sub>	0.531	< 0.001	Valid
	Y <sub>3.5</sub>	0.551	< 0.001	Valid
	Y <sub>3.6</sub>	0.729	< 0.001	Valid
	Y <sub>3.7</sub>	0.693	< 0.001	Valid

Source: From data processing, (2020)

From Table 2, it can be seen that all factor loads are greater than 0.3, and all factor loads are significant and they meet convergent validity.

# 5.2 Discriminant Validity

**Table 3** Discriminant validity

Indikator	$X_1$	$X_2$	$X_3$	$Y_1$	$Y_2$	$Y_3$	P-value
X <sub>1.1</sub>	0.532	0.429	-0.973	0.355	-0.225	0.006	< 0.001
$X_{1.2}$	0.718	-0.027	0.099	-0.033	-0.219	0.087	< 0.001
$X_{1.3}$	0.797	0.353	-0.481	0.001	0.264	-0.189	< 0.001
$X_{1.4}$	0.692	-0.584	0.531	-0.128	0.329	-0.034	< 0.001
$X_{1.5}$	0.746	-0.258	0.620	-0.104	-0.216	0.146	< 0.001
$X_{2.1}$	0.193	0.818	0.244	-0.091	-0.285	-0.067	< 0.001
$X_{2,2}$	-0.168	0.844	-0.010	0.029	0.008	-0.020	< 0.001
$X_{2.3}$	0.286	0.693	-0.433	-0.033	-0.049	0.012	< 0.001
$X_{2.4}$	-0.139	0.880	0.095	-0.040	0.073	0.072	< 0.001
$X_{2.5}$	-0.114	0.805	0.032	0.136	0.244	0.000	< 0.001
$X_{3.1}$	-0.051	0.561	0.747	-0.083	-0.066	0.060	< 0.001
$X_{3,2}$	0.112	-0.313	0.806	-0.287	-0.005	-0.018	< 0.001
$X_{3.3}$	0.256	0.053	0.818	-0.224	0.036	-0.085	< 0.001
$X_{3.4}$	-0.289	-0.698	0.454	0.142	0.006	0.347	< 0.001
$X_{3.5}$	-0.165	0.135	0.792	0.521	0.026	-0.149	< 0.001
Y <sub>1.1</sub>	0.042	0.473	-0.262	0.791	-0.227	0.003	< 0.001
Y <sub>1.2</sub>	-0.060	-0.169	0.178	0.757	-0.017	-0.010	< 0.001
Y <sub>1.3</sub>	-0.094	-0.223	0.341	0.750	-0.127	0.115	< 0.001
Y <sub>1.4</sub>	0.063	0.370	-0.336	0.780	0.109	-0.004	< 0.001
Y <sub>1.5</sub>	-0.044	0.298	-0.246	0.758	0.085	0.029	< 0.001
Y <sub>1.6</sub>	-0.180	-0.212	0.130	0.653	-0.123	-0.195	< 0.001
Y <sub>1.7</sub>	0.271	-0.666	0.266	0.682	0.318	0.041	< 0.001
Y <sub>2.1</sub>	0.040	0.033	-0.037	0.161	0.777	-0.025	< 0.001
$Y_{2.2}$	0.154	-0.049	-0.035	0.077	0.822	-0.246	< 0.001
Y <sub>2.3</sub>	-0.088	-0.493	0.290	-0.028	0.694	0.278	< 0.001
Y <sub>2.4</sub>	-0.003	-0.072	0.068	-0.217	0.826	0.075	< 0.001
Y <sub>2.5</sub>	-0.121	0.532	-0.256	0.013	0.783	-0.042	< 0.001
Y <sub>3.1</sub>	-0.121	0.155	-0.044	0.119	-0.121	0.755	< 0.001
Y <sub>3.2</sub>	-0.176	-0.120	0.418	0.027	-0.255	0.648	< 0.001
Y <sub>3.3</sub>	-0.280	-0.105	0.073	0.032	0.215	0.647	< 0.001
Y <sub>3.4</sub>	-0.297	-0.308	0.441	0.424	-0.448	0.531	< 0.001
Y <sub>3.5</sub>	-0.068	0.615	-0.419	0.314	-0.287	0.551	< 0.001
Y <sub>3.6</sub>	0.263	0.114	-0.336	-0.373	0.344	0.729	< 0.001
Y <sub>3.7</sub>	0.562	-0.331	-0.138	-0.366	0.380	0.693	< 0.001

In Table 3, it can be seen that the indicator  $X_{1.1}$  with loading 0.532 and cross-loading 0.429, -0.973, 0.355, -0.225, and 0.006, and it is concluded that the discriminant validity is fulfilled because the indicator loading is higher than the cross-loading. Likewise, with other indicators, loading is more significant than cross-loading so that all indicators meet discriminant validity.

**Table 4** AVE root and correlation coefficient

	$\mathbf{X}_1$	$X_2$	$X_3$	$\mathbf{Y}_{1}$	$\mathbf{Y}_{2}$	<b>Y</b> <sub>3</sub>
$\mathbf{X}_1$	0.703	0.619	0.663	0.603	0.637	0.556
$X_2$	0.719	0.810	0.805	0.587	0.598	0.470
$X_3$	0.663	0.705	0.736	0.589	0.618	0.434
$Y_1$	0.703	0.587	0.589	0.740	0.650	0.595
$\mathbf{Y}_{2}$	0.637	0.598	0.618	0.750	0.782	0.587
$\mathbf{Y}_3$	0.556	0.470	0.434	0.595	0.587	0.655

Table 4 shows that each AVE root on the main diagonal is higher than the correlation value so that the questionnaires of each variable meet discriminant validity.

## 5.1 Reliability

Reliability shows the extent to which the gauges are reliable or reliable. Reliability shows the consistency of a measuring instrument in measuring a situation. The technique used to conduct the reliability test is to use Cronbach alpha, which is grouping items into several parts. The closer Cronbach alpha is to 1, the higher the internal consistency reliability. While reliability less than 0.6 is considered bad, reliability in the range of 0.7 is acceptable, and more 0.8 is good.

**Table 5**Reliability

Variable	Composite reliability coefficients	Cronbach's alpha coefficients
$X_1$	0,872	0,738
$X_2$	0,905	0,867
$X_3$	0,851	0,778
$Y_1$	0,894	0,862
$Y_2$	0,887	0,840
$Y_3$	0,838	0,774

Source: From data processing, (2020)

Table 5 shows that the composite reliability and Cronbach alpha values for all constructs are above 0.7. Thus it can be concluded that all constructs meet the required reliability.

#### 6. Hypothesis testing

The significance of the parameters estimated gives beneficial information related to the relationship between the research variables. The basis used in testing hypotheses is the p-value contained in the inner model. If the p-value  $\leq 0.05$  (alpha 5%), it is said to be significant.

**Table 6**Testing research hypotheses

Research	Path	Path	P-value	Remarks	Research	Path	Path	P-value	Remarks
Hypothesis		Coefficient			Hypothesis		Coefficient		
H1	X1-Y1	0.539	< 0.001	Significant	H7	X1-Y3	0.090	0.119	Not signifi-
H2	X2-Y1	-0.013	0.435	Not signifi-	H8	X2-Y3	0.095	0.106	Not signifi-
Н3	X3-Y1	0.297	< 0.001	Significant	Н9	X3-Y3	-0.065	0.198	Not signifi-
H4	X1-Y2	0.019	0.403	Not signifi-	H10	Y1-Y2	0.618	< 0.001	Significant
H5	X2-Y2	0.028	0.359	Not signifi-	H11	Y1-Y3	0.244	< 0.001	Significant
Н6	X3-Y2	0.230	0.001	Significant	H12	Y2-Y3	0.252	< 0.001	Significant

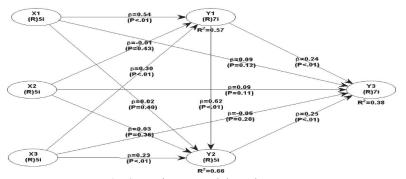


Fig. 3. Testing research hypotheses

#### 7. Discussion

## 7.1 Effect of personality on employee engagement

The first hypothesis testing results show the influence of personality variables on employee engagement at PT. PLN (Persero). The Power Generation Unit of Mahakam-East Kalimantan shows the path coefficient of 0.539 with a p-value <0.001. The p-value is smaller than 0.05 (5%). This result means that the personality variable has a positive and significant influence on employee engagement variables meaning the first hypothesis in this study was accepted; this can be explained by looking at the loading of the dominant indicator factors affecting each variable namely conscientiousness indicator (0.797) to energetic indicators (0.791), the relationship between these two indicators makes sense. It is acceptable where individuals with a high level of conscientiousness tend to be responsible for carrying out their duties, carrying out everything in detail and planning in work will make someone work more enthusiastic because they know their work in detail so Individual employee engagement is increasing. This supports research conducted by Ongore (2014) that conscientiousness is positively and significantly related to employee engagement.

## 7.2 Effect of motivation on employee engagement

The second hypothesis testing results indicate the influence of motivation variables on the involvement of employees in PT. PLN (Persero). The Power Generation Unit of Mahakam-East Kalimantan shows a path coefficient of -0.013 with a p-value of 0.435. The p-value is more significant than 0.05 (5%). This result means that motivation variable does not have a significant effect on employee engagement variable which means the second hypothesis in this study is rejected, it can be explained by looking at the dominant indicator loading factors affecting each variable namely the appreciation indicator (0.880) to the energetic indicator (0.791), the relationship between these two indicators makes sense. It is acceptable where individuals who get an award in an organization will increase the morale of the individual. However, although this research obtained not significant results, it can be explained that the awarding is not every when done. Hence, employee morale becomes inconsistent, so it affects the level of employee engagement, which decreases. However, seeing the loading factor of the two indicators is quite high if the award is given to employees at any time, the relationship between these two variables will likely be significant. This study does not support the research results of Gillet *et al.* (2013).

#### 7.3 Effect of job satisfaction on employee engagement

The results of the third hypothesis testing indicate the influence of job satisfaction variables in PT. PLN (Persero). The Power Generation Unit of Mahakam-East Kalimantan shows the path coefficient value of 0.297 with a p-value <0.001. The p-value is smaller than 0.05 (5%). These results mean that job satisfaction has a positive and significant influence on employee engagement variables, which means that the third hypothesis in this study is accepted. This can be explained by seeing the loading of the dominant indicator factors affecting each variable, namely the relationship indicator with the supervisor (0.818) to the energetic indicator (0.791), the relationship between the two indicators makes sense. It is acceptable where individuals who can establish a good relationship with the boss will undoubtedly affect the employee morale because there is emotional closeness and younger to explain things related to work so that employee engagement in working is increasing. The results of this study support research conducted by Brunetto *et al.* (2012).

## 7.4 Effect of personality on organizational commitment

The fourth hypothesis testing results show the influence of personality variables on organizational commitment of employees in PT. PLN (Persero). The Power Generation Unit of Mahakam-East Kalimantan shows the path coefficient value of 0.019 with a p-value of 0.403. The p-value is more significant than 0.05 (5%). This result means that the personality variable does not have a significant influence on the variable of organizational commitment, which means the fourth hypothesis in this study is rejected. This can be explained by looking at the dominant factor loading influencing each variable, namely the conscientiousness indicator (0.797) to the loyal indicators of the organization (0.826), the relationship between the two indicators makes sense. It is acceptable where individuals with high levels of prudence at work will focus on details and to ensure better that everything goes well, including career continuity in the future, thereby fostering a love of work that has an impact on loyalty to the organization. Although this research obtained not significant results, this could be due to the average employee of PT. PLN (Persero) UPDK Mahakam experienced the enactment of the retirement age regulation at 46 years so that employees will have a precise calculation of whether to survive or find another job with a reasonable retirement period of 56 years. However, seeing the loading factor of the two indicators is quite high; if employees are given a clear understanding of retirement readiness at the age of 46 years, it is possible that one day the relationship between these two variables becomes significant. This research does not support the results of Erdheim et al. (2006).

# 7.5 Effect of motivation on organizational commitment

The fifth hypothesis testing results show the influence of motivation variables on organizational commitment of employees in PT. PLN (Persero). The Power Generation Unit of Mahakam-East Kalimantan shows the path coefficient value of 0.028 with a p-value of 0.359. The p-value is more significant than 0.05 (5%). This result means that the motivation variable does not significantly influence the organizational commitment variable, which means the fifth hypothesis in this study is rejected. This can be explained by looking at the dominant factor loading influencing each variable, namely the appreciation indicator

(0.880) to the loyal indicator in the organization (0.826), the relationship between these two indicators makes sense. It is acceptable where individuals who get an award in an organization will be more enthusiastic in working and provide the best for organizations that foster loyalty in the organization. Although in this study obtained irrelevant results can be explained that the awarding only occurs at certain moments so that the possibility of employees leaving the organization is possible. However, seeing the loading factor of the two indicators is quite high; if the employee is always rewarded in other forms such as a thank you for what has been done consistently, then it does not rule out the possibility that this relationship will become significant. This study does not support the results of research by Yundong (2015).

#### 7.6 Effect of job satisfaction on organizational commitment

The results of the sixth hypothesis testing indicate the influence of job satisfaction variables on organizational commitment in PT. PLN (Persero). The Power Generation Unit of Mahakam-East Kalimantan shows the path coefficient value of 0.230 with a p-value of 0.001. The p-value is smaller than 0.05 (5%). These results mean that job satisfaction has a positive and significant influence on organizational commitment variables, which means that the sixth hypothesis in this study is accepted. This can be explained by seeing the loading of the dominant indicator factors affecting each variable, namely the relationship indicator with the supervisor (0.818) to the loyal indicator in the organization (0.826), the relationship between the two indicators makes sense. It is acceptable where employees who have good relations with superiors tend to get access to activity more efficiently, are more trusted, and have more initiative so that the employee loves the organization more and continues to join in it. The results of this study support research conducted by Kaplan *et al.* (2012).

#### 7.7 Effect of personality on employee performance

The seventh hypothesis testing results indicate the influence of personality variables on the performance in PT. PLN (Persero). The Power Generation Unit of Mahakam-East Kalimantan shows a path coefficient of 0.090 with a p-value of 0.119. The p-value is more significant than 0.05 (5%). This result means that personality variables do not significantly influence employee performance variables, which means the seventh hypothesis in this study is rejected. This can be explained by looking at the dominant factor loading influencing each variable, namely the conscientiousness indicator (0.797) to the employee performance indicator (0.755), the relationship between these two indicators makes sense. It is acceptable where individuals with high levels of prudence in working will focus on details and to ensure better that everything goes well, including career continuity in the future, thereby fostering a love of work that has an impact on higher-quality work to improve employee and organizational performance. Although in this study obtained not significant results, this could be due to the average employee of PT. PLN (Persero) UPDK Mahakam experienced the enactment of the retirement age regulation at 46 years, so employees will have a precise calculation of whether to stay or find another job so that employees become unfocused at work and performance targets are not achieved. This study does not support the research results of Tabak et al. (2009).

# 7.8 Effect of motivation on employee performance

The eighth hypothesis testing results indicate the influence of motivation variables on the performance of employees in PT. PLN (Persero). The Power Generation Unit of Mahakam-East Kalimantan shows the path coefficient value of 0.095 with a p-value of 0.106. The p-value is more significant than 0.05 (5%). This result means that motivation variables have not a significant influence on employee performance variables which means the eighth hypothesis in this study is rejected, this can be explained by looking at the loading of the dominant indicator factors affecting each variable namely the appreciation indicator (0.880) to the quality indicator (0.755), the relationship between these two indicators makes sense. It is acceptable where individuals who get an award in an organization will be more enthusiastic in working and provide the best for the organization in the form of quality work that impacts on better performance. Although this study obtained irrelevant results, it can be explained that the awarding only occurs at certain moments, so it does not affect the quality of employee work at any time. However, seeing the loading factor of the two indicators is quite high; if the employee is always rewarded in other forms such as a thank you for what has been done consistently, then it does not rule out the possibility that this relationship will become significant. This study does not support the results of Bright (2007).

# 7.9 Effect of job satisfaction on employee performance

The ninth hypothesis testing results indicate the influence of job satisfaction variables on the performance of employees in PT. PLN (Persero) The Power Generation Unit of Mahakam-East Kalimantan shows the path coefficient of -0.065 with a p-value of 0.198. The p-value is more significant than 0.05 (5%). These results mean job satisfaction does not significantly influence employee performance variables, which means the ninth hypothesis in this study is rejected. This can be explained by seeing the loading of the dominant indicator factors affecting each variable, namely the relationship indicator with the supervisor (0.818) to the quality indicator (0.755), the relationship between the two indicators makes sense. It is acceptable where employees who are in good relations with superiors tend to get access to activities, more trustworthy more efficiently, and more initiative so that the employees are more comfortable to be creative in producing higher quality work to support better performance. Although in this study obtained not significant results, this could be due to the relationship with superiors discussing more things that are not directly related to the work so that it does not have an impact on the quality of work. Seeing the loading factor of the two indicators is quite high; if the relationship with superiors is more about work, then it is possible that this relationship will become significant. This study does not support the results of research Yvonne, *et al.*, (2014).

#### 7.10 Effect of employee engagement on organizational commitment

The tenth hypothesis test results show the influence of employee engagement variables on organizational commitment in PT. PLN (Persero). The Power Generation Unit of Mahakam-East Kalimantan shows the path coefficient value of 0.618 with a p-value <0.001. The p-value is smaller than 0.05 (5%). This result means that the employee involvement variable has a positive and significant influence on the variable of organizational commitment of employees, which means the tenth hypothesis in this study is accepted. This can be explained by seeing the loading of the dominant indicator factors that affect each variable, namely the energetic indicator (0.791) to the loyal indicators of the organization (0.826), the relationship between these two indicators makes sense. It is acceptable where employees who are passionate about working will use all their potential, and more shows his love for the organization so that there is no desire to leave the organization. The results of this study support research conducted by Chairuddin et al. (2015) and Schaufeli and Bakker (2004).

#### 7.11 Effect of employee engagement on employee performance

The eleventh hypothesis test results show that the influence of employee engagement variables on the performance in PT. PLN (Persero). The Power Generation Unit of Mahakam-East Kalimantan shows a path coefficient of 0.244 with a p-value <0.001. The p-value is smaller than 0.05 (5%). These results mean that the employee engagement variable has a positive and significant influence on employee performance variables, which means the eleventh hypothesis in this study was accepted. This can be explained by looking at the loading of the dominant indicator factors that affect each variable, namely the energetic indicator (0.791) to the quality indicator (0.755), the relationship between these two indicators makes sense and is acceptable where employees who are passionate in working will use all the potential they have to achieve results higher quality work in achieving performance targets. These results are in line with research conducted by Bakker & Bal (2010).

# 7.12 Effect of organizational commitment to employee performance

The twelfth hypothesis testing results show that the influence of organizational commitment variables on the performance of employees in PT. PLN (Persero). The Power Generation Unit of Mahakam-East Kalimantan shows the path coefficient value of 0.252 with a p-value <0.001. The p-value is smaller than 0.05 (5%). This result means that the organizational commitment variable has a positive and significant influence on employee performance variables, which means the twelfth hypothesis in this study is accepted. This can be explained by looking at the dominant indicator loading factors that influence each variable, namely the loyal indicators of the organization (0.826) to the quality indicator (0.755). Higher quality work results and contributions to the achievement of more excellent performance. The results of this study support research conducted by Tolentino (2012).

# 8. Conclusion

The results have shown that personality and job satisfaction had a positive and significant effect on employee engagement. Motivation did not have any significant effect on employee engagement. Personality and motivation did not have any significant effect on organizational commitment. Job satisfaction had positive and significant effect on organizational commitment. Personality, motivation, and job satisfaction did not have any significant effects on employee performance. Employee engagement had positive and significant effect on organizational commitment. Employee engagement and organizational commitment had positive and significant effects on employee performance.

#### References

- Al-fakeh, F. A., Padlee, S. F., Omar, K., & Salleh, H. S. (2020). The moderating effects of organizational commitment on the relationship between employee satisfaction and employee performance in Jordanian Islamic banks. *Management Science Letters*, 10(14), 3347–3356.
- Allen, J, N., & Meyer, P, J. (1990). The measurement and antecedents of affective, continuance, and normative commitment to the organization. *Journal of Occupational Psychology.*, 63, 1–18.
- Arabshahi, M., & Arabshahi, G. A. (2014). The relationship between personal characteristics, communication, and job satisfaction. *Management Science Letters*, 4, 1595–1604.
- Bakker, B, A. & Bal, Matthijs, P. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology*, 83(1), 189–206.
- Bakotić, D. (2016). Relationship between job satisfaction and organizational performance. *Economic Research-Ekonomska Istrazivanja*, 29(1), 118–130.
- Bright, L. (2007). Does Person-Organization Fit Mediate the Relationship Between Public Service Motivation and the Job Performance of Public Employees? *Review of Public Personnel Administration Journal*.
- Brunetto, Y., Teo, S. T. T., Shacklock, K., & Farr-Wharton, R. (2012). Emotional intelligence, job satisfaction, well-being, and engagement: Explaining organizational commitment and turnover intentions in policing. *Human Resource Management Journal*, 22(4), 428–441.
- Chairuddin, S., Riadi, S, S., Hariyadi, S., & Sutadji. (2015). Antecedent work engagement and organizational commitment to increase the outsourcing employees performance in the department of cleanliness and horticultural. *European Journal of Business and Management*, 7(14), 1–14.
- Chayomchai, A. (2020). The moderating effect of generation on the relationship between commitment and performance:

Evidence from the human resource management model. Management Science Letters, 10, 3707–3716.

Colquitt, Jason A. Jeffery A. LePine, and Michael J. Wesson. 2011. Organizational Behavior. New York: Mc Graw-Hill.

Erdheim, J., Wang, M., & Zickar, M.J. (2006). Linking the big five personality constructs to organizational commitment. *Personality and Individual Differences*, 41, 959-70.

Gillet, N., Huart, I., Colombat, P., & Fouquereau, E. (2013). Perceived organizational support, motivation, and engagement among police officers. *Professional Psychology: Research and Practice*, 44(1), 45–56.

Greenberg, J., & Baron, R. A. (2003). Behavior in Organizations. New Jersey: Pearson Education, Inc.

Ivancevich, M. J., & Konopaske, R. (2013). Human Resource Management. Twelfth Edition. New York: Mc Graw Hill.

Kaplan, M., Ogut, E., Kaplan, A., & Aksay, K. (2012). The Relationship between Job Satisfaction and Organizational Commitment: The Case of Hospital Employees. *World Journal of Management*, 4(1), 22–29.

Kreitner, R., & Kinicki, A. (2010) Organizational Behavior. Ninth. New York: McGraw-Hill/Irwin.

Lee, T. W., & Steers, R. M. (2017). Facilitating effective performance appraisals: The role of employee commitment and organizational climate Performance measurement and theory (pp. 75-93): Routledge.

Luthans, F. (2011). Organizational Behavior. New York: McGraw-Hill.

McShane, S. L., & Von Glinow, M. A. (2010) Organizational Behavior. 5th edition. New York: McGraw-Hill/Irwin.

Nasrulloh, R., Subyantoro, A., & Sayekti, A. (2020). The effects of work motivation and information technology on farmers' performance. *Management Science Letters*, 10(16), 3741-3748.

Newstrom, J. W. (2007). Organizational Behavior: Human Behavior at Work. Twelfth Edition New York. McGraw-Hill.

Ongore, O. (2014). A study of relationship between personality traits and job engagement. *Procedia - Social and Behavioral Sciences*, 141, 1315–1319.

Robbins, S. P., & Judge, T. A. (2015) Organizational Behavior. United States: Pearson Education, inc.

Sabuhari, R., Sudiro, A., Irawanto, D., & Rahayu, M. (2020). The effects of human resource flexibility, employee competency, organizational culture adaptation, and job satisfaction on employee performance. *Management Science Letters*, 10(8), 1777–1786.

Schaufeli, W. B., Salanova, M., Bakker, A. B., & Alez-rom, V. G. (2002). The measurement of engagement and burnout: A Two-sample confirmatory factor. *Journal of Happiness Studies*, 71–92.

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293–315.

Schaufeli, W. B., Taris, T. W., & Bakker, A. B. (2006). Dr. Jeckyll or Mr. Hyde: On the differences between work engagement and workaholism. In R. J. Burke (Ed.), Research companion to working time and work addiction. Cheltenham Glos: Edward Elgar.

Schermerhorn, J. R., Hunt, J. G. and Osborn, R. N. (2002) *Organizational Behavior*. Seventh. United States: John Wiley & Sons.

Shahzadi, I., Javed, A., Pirzada, Shahzaib, S., Nasreen, S., & Khanam, F. (2014). Impact of employee motivation on employee performance. *European Journal of Business and Management*, 6(23), 159–167.

Tabak, F., Nguyen, N., Basuray, T., & Darrow, W. (2009). Exploring the impact of personality on performance: How time-on-task moderates the mediation by self-efficacy. *Personality and Individual Differences*, 47(8), 823–828.

Tolentino, R. C. (2013). Organizational commitment and job performance of the academic and administrative personnel. *International Journal of Information Technology and Business Management*, 15(1), 51–59.

Yundong, H. (2013). Impact of intrinsic motivation on organizational commitment: An Islamic Banking Perspective. *International Business and Management*, 2(2), 85–94.

Yvonne, W., Rahman, R. H. A., & Long, C. S. (2014). Employee job satisfaction and job performance: A case study in a franchised retail-chain organization. *Research Journal of Applied Sciences, Engineering, and Technology*, 8(17), 1875–1883.



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