Research Paper

Analysis of the Effect of Leader Member Exchange (LMX), Job Characteristics, Job Resources and Personal Resources on Increasing Work Engagement at PT Kokoh Semesta

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ABSTRACT

Human Resources (HR) is the main driver in achieving the vision and mission of a company. The achievement of company goals will be realized if supported by quality human resources, so it is hoped that HR will be able to respond quickly and be able to face changes in the business world. The purpose of this study is to Analyzing the perception of employee job characteristics at PT Kokoh Semesta, Analyzing the perception of employee job resources at PT Kokoh Semesta, Analyzing the perception of Leader Member Exchange (LMX) employees at PT Kokoh Semesta, Analyzing the perception of employee personal resources at PT Kokoh Semesta and Analyzing employee work engagement at PT Kokoh Semesta. The analysis technique used in this study is structural equation modeling (SEM). The structural equation model or SEM of the Partial Least Squere (PLS) method is a statistical technique that allows simultaneous testing of a series of relatively complex relationships. The results showed that LMX, personal resources and job characteristics had a significant influence and positive influence on the work engagement of PT Kokoh Semesta employees. However, job resources have no effect on work engagement. The increase or decrease in authority, the presence or absence of social support and guidance from superiors has an influence on the level of work engagement at PT Kokoh Semesta but the influence is not significant.

INTRODUCTION

The company is facing difficult conditions with increasingly sharp competition in the last 30 years, due to the currents of globalization, the development of communication and information technology that is happening very quickly. Changes in the business environment force organizations to compete in creating product innovations and technologies, sales, distribution and customer satisfaction. Adaptive change and development can be made to create organizational excellence i, so that the organization is able to compete in continuing business continuity and achieving the effectiveness and performance expected by the organization (Gibson et al. 1996).

Facing these conditions, an organizational tool is needed that focuses on the company's business environment, both internal and external. The conditions of a highly dynamic business environment with a high level of competition make many companies aware that the key to success lies not only in large capital, advanced technologies, or newly produced products. In addition to these factors, currently one of the actors

who are able to create sustainable competitiveness is human resources.

Human Resources (HR) is the main driver in achieving the vision and mission of a company. The achievement of company goals will be realized if supported by quality human resources, so it is hoped that HR will be able to respond quickly and be able to face changes in the business world. In Sutanto (1999) it is stated that employee commitment to leaders has a real impact on employee work results rather than employee commitment to the organization. This means that an employee's commitment to the organization can be created by itself if the employee has a commitment to his or her leader. So that if employees already have a good commitment to the organization, another most important aspect that must be considered by the organization is to create competitive advantage in improving the quality and performance of its human resources.

In the midst of the current labor competition, inevitably companies are required to continue to be able to innovate in maintaining company productivity by reducing the turnover rate that occurs in the company. The company must be able to create a work environment that matches the expectations of employees. The suitability of the work environment with employees can be created if the company is able to describe clear work targets and directions to each employee, provide a clear career system, create development and training programs, and fulfill aspects of employee welfare. If the company cannot accommodate the suitability of the work environment with the expectations of employees, then employees will tend to find other jobs that match their expectations, so that employees will leave their jobs and find new jobs.

Today's companies must be able to accommodate these desires and expectations if they still want to get the best abilities possessed by employees. Companies must be sensitive and understand that employees are not robots who are only given demands to work towards achieving company goals and ignore the humanism side that is owned. The neglect or mismatch of the employee's wishes and expectations with the work he is doing at this time can result in the employee leaving the company. Employees will choose to work in other companies that pay more attention to their welfare and needs.

The loss of the company's best employees will have an impact on the running of business operations in the company because each employee already has his own responsibility in achieving company success. In addition to having an impact on the operational aspect, turnover can also harm the company in in terms of labor costs that must be incurred, because there will be costs such as split money, uselessness of facilities, staffing costs (such as recruitment, interviews, entrance tests, changes in payroll), as well as training costs for new employees. The more noticeable impact of employee turnover is the loss of productivity until the new employee achieves the same productivity as the old employee who chooses to leave the company (Pandiangan 2011). Existing employees will be affected by the departure of such employees, because the workload will increase as long as the work has not been replaced. Not to mention that nowadays it is increasingly difficult to find a competent employee replacement because the competition for HR search is getting tougher and changes in employee work interests.

Research conducted by Takawira et al. (2012) revealed that turnover intention is closely related to work engagement. A high turnover significantly shows the low level of work engagement in a company,

Work engagement is the current issue in HR management. Work engagement is defined as a positive mental state, which is related to work characterized by spirit (vigor), dedication (dedication), and passion (absorption) (Schaufeli et al. 2002). Work engagement LMX is one of the constructs that is incorporated into the context of positive psychology. The construct emphasizes the

welfare of a karayawan (Schaufeli et al. 2002). Employees who are engaged with their work have good relations with their co-workers and the company climate will be better. Employees who have a high level of work attachment will show their best performance, because the employee enjoys the work done (Bakker and 2010).

Baker and Demerouti (2007) found that an engaged work environment is critical to the success of an organization. So it is important for us to know what antecedents will affect the work engagement. Work Engagement can be influenced by factors that can trigger internal and external motivation of the employee himself. Job resources (job resources) which refer to the physical, social, or organizational factors of the work that function as factors that influence the achievement of work goals and can encourage personal growth. This job resource will act as a trigger for the emergence of intrinsic motivation from employees. It is this intrinsic motivation that will satisfy basic human needs, such as the need for autonomy (Van de Broeck et al. 2008). In addition to job resources, another antecedent is job characteristics. Job characteristics are physical, psychological, social, and organizational aspects of work that require continuous effort in physical, cognitive, and emotional forms. In other words, job characteristics are the amount of work that must be completed within a certain deadline, qualitatively the workload will have an impact on the reaction of employees to their work. The dimensions of job characteristics that affect work engagement are autonomy, skill variety, feedback, task significance, task identity, and social support and colleagues collectively and individually. In other words, these factors of job characteristics will be able to directly affect the increase in extrinsic motivation of job resources.

Further research by Bakker and Demerouti (2008) emphasized that engagement is predicted by job resources related to personal resources (Personal Resources) and will ultimately result in high performance.

Personal Resources is a positive self-evaluation related to resilience and refers to an individual's sense of ability to control and have a good impact on his environment. Personal Resources are aspects of the self that are generally associated with excitement and feelings that the self is able to manipulate, control and have an impact on the environment in accordance with their desires and abilities.

The LMX theory further explains that employees experiencing low-quality LMX relationships are unlikely to contribute beyond the minimal effort required at work. The tendency to positive work behavior is due to the presence of feelings of togetherness, loyalty, commitment, support and trust that can increase over time (Maslyn and Uhl-Bien, 2001). The company knows the interaction of superiors and brings hannya to increase work engagement to achieve organizational excellence. Therefore, employees who experience high-quality LMX relationships tend to contribute beyond the minimum requirements of the job.

PT Kokoh Semesta as a manufacturing company that was established in 1981. The company has a vision to become a world-class company in the steel construction industry. The company provides services to the housing and agricultural industries in the manufacture of high-quality steel constructions. The value offered by the company is being able to provide timely services at competitive prices if it is shared with other companies. PT Kokoh Semesta has a core business in the manufacture of pressure vessels, dish heads, storage tanks, steel towers, and others. PT Kokoh Semesta is a family company that is managed independently, so almost all leaders who are here have the same character and way of leading.

Operationally, PT Kokoh Semesta is included in the good manufacturing industry because the company can manage production operations very well. Production management is also supported by sophisticated equipment owned by the

company. On the other hand, PT Kokoh Semesta also has loyal customers, this can be seen from the requests that tend to repeat and there are never complaints. But here again, good operational activities are not supported by good employee conditions. On the employee management side, the company cannot accommodate employee expectations. So many employees do not survive and will tend to find another job. Employee work behavior that also needs attention is like the lack of enthusiasm of employees at work. Employees meet discipline by arriving on time, but employees do not work wholeheartedly. Other conditions are also caused due to monotonous work conditions with a high insensitivity of repetitive work. Job conditions in the manufacturing industry make employees will work with a low-tendent interaction with other colleagues, because even the slightest negligence that occurs in the operation of the machine will have a great impact on the final result of the production goods. If employees continuously work not optimally, then this will be able to directly impact the operations of PT Kokoh Semesta itself.

Employees in manufacturing companies who have a bad work attitude will increase work accidents, lower employee morality at work and employees tend not to prosper psychologically, physically and materially. Ayu's research (2015) on 116 respondents who are workers in manufacturing in Indonesia shows that job resources have a direct and positive effect directly on work engagement. In this study, the factors studied were Leader Member Exchange (LMX), job characteristics, job resources and personal resources.

Previous research on the influence of job characteristics on work engagement, the influence of LMX on work engagement, the influence of job resources on work engagement and personal resources on work engagement has also been widely carried out in theses and dissertations, but the influence of the four at once it is still rarely done. Research on this model needs to be researched because in manufacturing companies the employment process and LMX, which explains the relationship between superiors and employees, based on the description that has been explained can be a factor that can give rise to and maintain work engagement.

METHODS

This research was carried out at PT Kokoh Semesta, PT Kokoh Semesta is included in the category of steel specialist construction companies, established since 1981 and continues to experience development until now. This is certainly very much in accordance with this study, where the researcher analyzed how work engagement in the company was reviewed from Job Characteristics, Job resources, Personal Resources and the quality of LMX The research was conducted in January 2017 – June 2017.

The data used in this study are primary data of secondary data, with the following details:

a. Primary data

    Primary data were obtained from the object under study directly using questionnaires given directly to respondents.

b. Secondary data

    Secondary data is literature relevant to this study, which is used to support primary data in the form of books, journals and data that already exists at PT Kokoh Semesta, the secondary data used in this study are turnover data and company employee data, report writings, guidelines, regulations, and other sources that support the research.

For the change of work engagement in the study, the Utrecht Work Engagement Scale was used, which was developed by Wilmar Schaufeli and Arnold Bakker since 2002. This scale has been used by many researchers in the world to measure work engagement and has been translated into 11 languages. Schaufeli continued to update and test this scale until the last in 2006, UWES – 9, which is the UWES scale with 9 question items. The UWES scale – 9, this is

what will be used in this study. For research needs, UWES – 9 translated researchers in Indonesian.

Pt Kokoh Semesta company has two types of employees, namely the so-called permanent and contract employees, permanent employees are clerk-level employees to the director level while contract employees are freelance daily employees. Permanent employees number 263 people, this group is also called employees with an average of high education, have soft skills and technical skills that are relied on.

The population in this study was all permanent employees of PT Kokoh Semesta company which amounted to 263 people. Permanent employees consist of staff-level employees to the senior manager level from five departments and eight branches of the company throughout Indonesia. Permanent employees of PT Kokoh Semesta are the criteria for respondents in this study.

The example selection techniques are grouped into two, namely probability sampling and non-probability sampling. Probability sampling gives each element of the population an equal opportunity to be selected as an example with random selection of examples. Non-probability sampling selects examples not randomly so that each element of the population has a different probability of being selected as an example (Sugiyono 2010).

The analysis technique used in this study is structural equation modeling (SEM). The structural equation model or SEM of the Partial Least Square (PLS) method is a statistical technique that allows simultaneous testing of a series of relatively complex relationships. Complex relationships can be established between one or several dependent changers and one or several independent changers. There may also be a changer who plays a dual role, namely as an independent changer in a relationship, but becomes a dependent changer in another relationship, given the existence of a tiered causality relationship each dependent and independent changer

can take the form of a factor or construct built from several indicator changers, similarly among the changers it can form a single changer that is observed or measured directly in the research process.

Such structural equation models have been widely known in social studies through various names, namely: causal modelling, causal analysis, simultaneous equation modeling or structural analysis of covariance. Often SEM is also referred to as path analysis or confirmatory factor analysis, because in fact these two names are special types of SEM.

Inner Model (Inner relation, structural model and substantive theory). Inner Model or also called inner relation describes the relationship between latent variables based on theory. Structural models were evaluated by looking at the values of R-Square for dependent latent constructs, Stone Geisser Q-square test for predictive relevance and t-tests, as well as the significance of the coefficients of structural path parameters. Changes in R-square values can be used to assess the effect of independent latent changers on dependent latent changers.

Outer Model (Outer Relation or Measurement Model). Outer Model or outer relation defines how the relationship between latent changers and indicators. Outer Model consists of 2 (two) kinds of modes, namely reflective mode (mode A) and formative mode (mode B). Reflective mode is the relationship from a latent changer to an indicator changer or "effect". Meanwhile, formative mode is a relation of changing indicators to form a latent "causal" changer. The measurement model with the reflective indicator is evaluated with convergent validity and discriminant validity of its indicators. Convergent Validity of the measurement model with reflexive indicators with assessment is based on the correlation between the item score and the construction score. The individual reflexive measure is said to be high if it correlates more than 0.70 with the construct to be measured. However, for preliminary research from the development

of a scale measuring the loading value of 0.50 to 0.60 is considered sufficient (Chin 1998 in Imam Ghozali 2006).

Discriminate validity of the measurement model with reflexive indicators is assessed based on cross loading measurements with constructs. If the correlation of a construct with a measurement item is greater than the size of other constructs, then it indicates that latent constructs predict sizes on their blocks better than sizes on other blocks. Another way is to look at the square root of average variance extracted (AVE) value of each construct with a correlation between the construct and the other constructs in the model. If the AVE root value of each construct is greater than the correlation value between the construct and the other constructs in the model, then it is said to have a good discriminant validity value (Ghozali 2006). In addition, the composite reliability of the indicator block is also evaluated. Composite reliability block indicators that measure a construct can be evaluated with two kinds of measures, namely internal consistency and Cronbach's Alpha.

RESULTS

Gender is an important component in human resource strategy. Respondents in this study were dominated by men with a total percentage reaching 52%. Based on these results, it can be seen that the majority of employees at PT Kokoh Semesta are 31 to 40 years old, which is 52.38% of the total sample. This age range shows that the productive age range working at PT Kokoh Semesta. In this generation of respondents have a high level of productivity. In addition, 63.4% of respondents obtained in this study had a Strata 1 (S1) education level. A person's level of education will also affect the values he adheres to, the way of thinking, the way of looking at and even the perception of a problem. Likewise, the respondents obtained in this study worked the majority with a working period of 16 to 20 years of 52.38%. This shows that with a longer working period, you can establish good communication and the management of tasks at work will be better as well.

Table 1 Demographic characteristics of respondents

Characteristic	Category	Sum (n)	Percentage (%)
Gender	Man	33	52.4
	Woman	30	47.6
Age	21-30 Years	21	33.3
	31-40 Years	33	52.4
	41-50 Years	5	7.9
	51-60 Years	4	6.3
Education Level	SMA	5	7.94
	Diploma	17	26.98
	Undergraduate (S1)	40	63.49
	Masters (S2)	1	1.59
	Doctorate (S3)	0	0
Service Life	<1 Year	5	7.9
	1-5 Years	4	6.3
	6-10 Years	0	0
	11-15 Years	21	33.3
	16-20 Years	33	52.4
	>20 Years	0	0

The analytical tool used in this study is structural equation modeling (SEM) using a partial least square (PLS) approach. The SEM model in this study used 63 respondents of PT Kokoh Semesta. The variables studied in this study were Leader Member Exchange (LMX), Job Characteristics, Job Resources, Personal Resources and Work Engagement with each of the indicators they have. Data on respondents who have passed the instrument validity and reliability test using SPSS

proceeded to the analysis stage using SmartPLS. There are three stages in the SEM-PLS analysis, the first stage is the outer model analysis, the second stage is the inner model analysis, and the third stage is hypothesis testing.

Analysis of the measurement model is carried out to determine the validation and reliability of the model measurement in the study. Outer model analysis is related to the relationship between latent variables and their indicators so that through the evaluation of outer models it can be known to what extent an indicator can explain the latent constructs in the research model. The evaluation of the outer model consists of convergent validity, discriminant validity, composite reliability, average variance extracted (AVE), and Cronbach's alpha.

Convergent validity can be seen from the value of the latent variable loading factor against the indicator which shows the size of the validity of each indicator as a latent variable manifest. The indicator can be said to be valid if the value of the loading factor is above 0.7 and can still be considered valid up to 0.5 (Latan and Ghozali 2012). Discriminant validity is the value of cross loading that is tested to find out whether the construct has sufficient discriminants. The cross loading value of an indicator on the intended latent variable is recommended to be higher than the cross loading value with other latent variables. Composite reliability is measuring the actual reliability value of a variable. Variables with a composite reliability value of > 0.7 are considered to have high reliability (Ghozali and Latan 2015). The recommended average variance extracted (AVE) is > 0.5 (Chin 1998). The recommended AVE value is more than the value of 0.5 which means that 50% more variance of the indicator can be explained (Ghozali and Latan 2015). Cronbach's alpha, which is a reliability test, can be strengthened by the Cronbach's alpha test. This test is carried out to measure the lower limit of the reliability value of a variable. The value received is if the value is above 0.7 (Ghozali and Latan 2015).

Table 2 Evaluation of Measurement Models

Latent Variables	Indicators	Validity		Reliability	
		Loading Factor	*AVE*	*Composite Reliability*	*Crobach's App*
Leader Member Exchange (LMX)	LMX1	0.698	0.516	0.94	0.931
	LMX2	0.767			
	LMX3	0.524			
	LMX4	0.824			
	LMX5	0.475			
	LMX6	0.659			
	LMX7	0.718			
	LMX8	0.708			
	LMX9	0.691			
	LMX10	0.846			
	LMX11	0.665			
	LMX12	0.744			
	LMX13	0.794			
	LMX14	0.767			
	LMX15	0.795			
Job Resources (JRS)	JRS1	0.642	0.514	0.946	0.939
	JRS2	0.748			
	JRS3	0.784			
	JRS4	0.785			
	JRS5	0.672			
	JRS6	0.567			
	JRS7	0.503			
	JRS8	0.838			
	JRS9	0.721			
	JRS10	0.886			
	JRS11	0.822			
	JRS12	0.772			
	JRS13	0.739			
	JRS14	0.624			
	JRS15	0.718			
	JRS16	0.664			
	JRS17	0.578			

Table – 2 To Be Continued…					
Personal Resources (PRS)	PRS1	0.65	0.502	0.94	0.929
	PRS2	0.561			
	PRS3	0.784			
	PRS4	0.713			
	PRS5	0.748			
	PRS6	0.715			
	PRS7	0.771			
	PRS8	0.654			
	PRS9	0.71			
	PRS10	0.258			
	PRS11	0.772			
	PRS12	0.82			
	PRS13	0.675			
	PRS14	0.783			
	PRS15	0.841			
	PRS16	0.68			
Job Characteristics (JCR)	JCR1	0.853	0.529	0.906	0.876
	JCR2	0.807			
	JCR3	0.713			
	JCR4	0.028			
	JCR5	0.615			
	JCR6	0.053			
	JCR7	0.538			
	JCR8	0.866			
	JCR9	0.781			
	JCR10	-0.331			
	JCR11	0.714			
	JCR12	0.755			
	JCR13	0.853			
	JCR14	0.851			
	JCR15	0.683			
Work Engagement (WE)	WE1	0.566	0.656	0.97	0.966
	WE2	0.195			
	WE3	0.889			
	WE4	0.927			
	WE5	0.841			
	WE6	0.715			
	WE7	0.824			
	WE8	0.788			
	WE9	0.808			
	WE10	0.848			
	WE11	0.839			
	WE12	0.938			
	WE13	0.914			
	WE14	0.885			
	WE15	0.873			
	WE16	0.841			
	WE17	0.699			

Based on Table 2, there are some indicators that are invalid due to loading factor values below 0. 7. The invalid indicators are your Leader knows all the problems experienced by his employees (LMX1), your Leader knows all the needs you need to complete the work (LMX3), your Leader develops the potential that each employee has (LMX5), Your leader supports every decision made by his employees in completing the work (LMX6), your Leader gives appreciation for the results of the work produced (LMX9),), your Leader is willing to provide assistance in solving problems that exist in the work (LMX11), The work you produce greatly affects the income you will get (JRS1), Communication between colleagues is very good (JRS5), Communication greatly affects your smoothness in completing work (JRS6), Superiors provide very large support in the success of your work (JRS7), Superiors can provide clear information regarding your role within the company (JRS14), The company informs the role that each employee has within the company (JRS16), The type of work assigned to you tends to vary (JRS17), you have confidence and ability in yourself to be able to do self-planning and self-regulation in completing

work (PRS1), you have confidence in yourself to be able to complete tasks with varying degrees of difficulty (PRS2), you have a feeling of satisfaction with the work you produce (PRS8), you can appreciate the results of work produced by colleagues (PRS10), you have the confidence to be able to solve every problem at work (PRS13), Employees have the ability to be able to think appreciatively (PRS16), The layout form of your workspace is very comfortable in carrying out work activities (JCR4), the work deadline you have makes you feel more challenged in working (JCR5), you do not feel difficult with the work deadline

given by the boss (JCR6), you feel depressed with the job target given to you (JCR7), You have a good relationship between fellow colleagues (JCR10), Clarity of your role affects the achievement of the performance you produce (JCR15), When working, you feel very energized (WE1), It is difficult for you to be able to break away from your current job (WE17). So the results concluded that the convergent validity test has not been met. This means that the existence between correlations between different instruments is not yet valid enough.
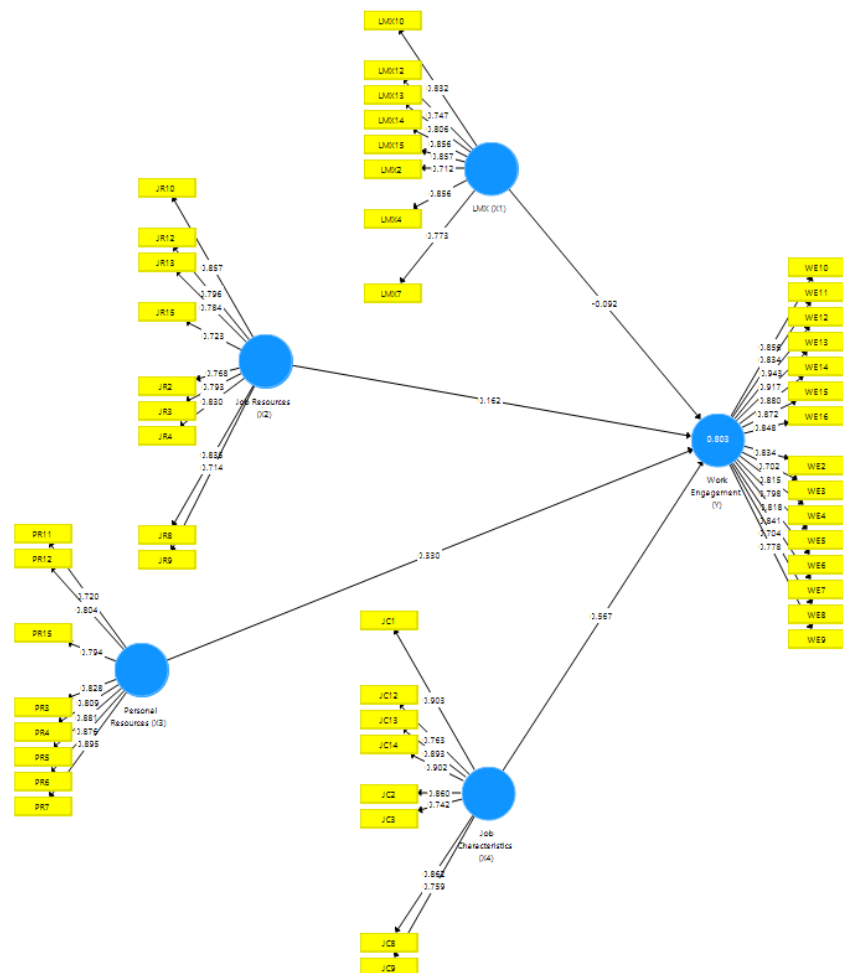

Figure 1 Value Loading Factor measurement model

Evaluation of structural models is carried out by analyzing the value of the coefficient of determination or R2, the value of the path coefficient and the value of t-statistics. The value of R2 is seen from the construct of the endogenous variable or the affected

variable. According to Chin (1998), R2 values are categorized into three categories, namely R2 values of 0.67 (strong), 0.33 (moderate) and 0.19 (weak).

Table 3 R-Square Values

Latent Variables	*R-Square* (R^2)
Work Engagement	0.803

This research was conducted on all companies that experienced market discounts when conducting an initial public offering (IPO) on the Indonesia Stock Exchange (IDX) for the 2015-2019 period using the purposive sampling method. Research conducted on the IDX for the 2015-2019 period from a total population of 179 obtained a research sample of 144 companies, 35 companies were declared relisted at the IPO. The endogenous variables used in this study mostly have an R2 value which is included in the strong category. The first R2 value, namely LMX, JRS, PRS and JCR, is able to explain the diversity of Work Engagement by 80.3% and the rest is explained by other independent variables that are not in this research model. The acquisition of the value of R2 is used to calculate the value of Q2 or predictive relevance. According to Hair et al (2006), basically the value of Q2 has the same interpretation as the value of R2, that is, the higher the value of the data, it can be said that the model has a good predictive relevance, while if the value of Q2 < 0 then the model lacks good predictive relevance (Chin 1998). Here is the calculation of the value of Q2. If the test is only my one then from that the value of Q2 is equal to R2, which is 0.803. The results of the Q2 acquisition based on calculations of 0.803 this show that the magnitude of the diversity of data from the study can be explained by the structural model of 80.3%. While the remaining 19.7% indicate that there are other variables that are not in the model that can affect work engagement at PT Kokoh

The next stage after going through the measurement requirements, the next stage can be done, namely hypothesis testing with the bootstrapping method on SmartPLS. According to Efron and Tibshirani (1998), the bootstrapping method is a procedure that is carried out by repeatedly taking a new number of N samples from n-sized origin data, in this case a new sample is

obtained by taking sample points from the origin data one by one to n times. The purpose of using bootstrapping is to allow for freely distributed data and require normal distribution assumptions. Quantiles in the normal distribution can be used as a critical value or calculated t that can be compared with the table t value, then it can be said that the coefficient is significant at a certain probability of error or the degree of significance.

The determination of significant levels is not always the same applied to each study. In marketing research, the significant level used usually assumes a significant level of 5% (Hair et al 2006). With a significant rate of 5% then the value of t 2-tailed is 1.96. Thus the calculated value of t must be more than 1.96 in order for it to be concluded that the hypothesis is accepted. If the test results on the inner model are significant, it can be concluded that there is a meaningful influence on the latent variable on other variables. In this study, the bootstrapping method was carried out by resampling as much as 500 times so that the results were more stable so that the value of statistical significance would remain consistent.

The decision of the hypothesis is determined by comparing the calculated t-value with the table t through the confidence level. In this study, the confidence level used was α = 0.05 with a table t value of 1.96. The results of the t count test can be seen in Table 4.10. The relationship between LMX and work engagement is a significant negative value indicated by an orginal sample value of -0. 092 and the calculated t value is 0.79. A negative original sample value of -0.092 indicates that the direction of the relationship between LMX and work engagement is negative or the increasing value of LMX, the work engagement will decrease by 0. 092, and vice versa.

In the second hypothesis, the relationship between JRC work engagement has a significant positive value which is indicated by the original sample value of 0.162 and the calculated t value of 1.417. The original sample positive value of 0.162 indicates that

the direction of the relationship between JRC and work engagement is positive or the increasing value of JRC, the work engagement will also increase by 0. 162.

Table 4 Hypothesis Test Results

Variable	Original Sample	t-Value	p-values	Hypothesis
LMX→ Work Engagement	0.092	2.79 pm	0.000	H₁ accepted
JRC→ Work Engagement	0.162	1,417	0.000	H₂ accepted
PRS→ Work Engagement	0.33	3.155	0.000	H₃ accepted
JCR→ Work Engagement	0.567	4.762	0.002	H₄ accepted

The third hypothesis states that prs towards work engagement has significant results and positive directions with an original sample value of 0.33 and a calculated t value of 3.155 so that the hypothesis can be accepted. The original sample value obtained was 0.33 which stated that the increasing PRS value would increase work engagement by 0.33.

Furthermore, the fourth hypothesis shows the result that JCR affects work engagement. The results of the hypothesis test stated that the relationship between JCR and work engagement was significantly positive with the original sample value of 0.567 with a calculated t value of 4.762 where the value was greater than the table t of 1.96. The increasing value of JCR will increase as well as the value of work engagement by 0.197.

Based on the results of the t-test which can be seen in Table 4.10 that the value of the LMX t-test is 2.79, this result states that H0 is rejected (t-count > t-table) so that H1 is accepted. The test results showed that LMX had a direct positive effect on work engagement with an estimated value of the model load factor of 0.092. The results of this hypothesis test establish that if LMX in the organization increases, it will also increase employee work engagement. The results of this study are in accordance with Kendrick's research (2013) that there is a strong relationship between work engagement and LMX. Liden and Maslyn (1998) explain that LMX has an effect on employee work behavior.

Good LMX quality will make employees will become in group with superiors, on the contrary, the quality of relationships between superiors and subordinates is poor, then employees or subordinates will become out of the group. An in-group group is a group that is loyal and willing to perform tasks outside its job description. On the contrary, the out group will show a decrease in work motivation and tend to easily do work beyond the expectations of their superiors. According to Katrinli et al. (2010) the quality of superior and subordinate relationships based on mutually beneficial trust and commitment. In high LMX, employees receive support from their superiors formally and informally and there is openness in communication so that it will increase employee engagement at work.

Based on the results of the t-test, it can be seen in Table 4.10 that the characteristic t-test value is 1,417. This result states H0 is accepted (t-count < t-table) then H1 is rejected. The results of the hypothesis test showed that Job resources had no effect on work engagement with a load factor of 0.162.

Job resources are aspects of the job that stimulate employees to develop, for example authority, social support, guidance from superiors, career development. The increase or decrease in authority, the presence or absence of social support and guidance from superiors has an influence on the level of work engagement at PT Kokoh Semesta but the influence is not significant.

Based on the results of the t-test, it can be seen in Table 4.10 that the characteristic t-test value is 4,762. This result states H0 is rejected (t-count > t-table) then H1 is accepted. The results of the hypothesis test show that job characteristics affect work engagement with a load factor of 0. 567, meaning that the better the job characteristic will increase work engagement.

This result is in line with the research of Yungsiana, et al. (2014) that the character of

self-esteem in teachers in high schools in Malang has a significant effect on work engagement. When PT XYZ employees have great resilience and confidence that they are able to control, manipulate and have an impact on the environment according to their wishes and abilities, it will encourage increased work engagement at PT XYZ. This result is in accordance with previous studies that stated that more optimistic employees are known to be less stressed than employees who are less optimistic (Makikangas & Kinnunen 2003). In this study, it was also stated that employees who have high personal resources will be more effective in facing conditions that describe job demands and avoid negative behavior.

The magnitude of the influence of personal resources on work engagement illustrates the important role of individual characteristics in work. The employees of PT XYZ are employees with individual characteristics who have high self-esteem, optimism and confidence in themselves which are shown through their quality and responsibility at work. The significant influence of individual characteristics on engagement is also supported by research by Fahrani et al. (2011) conducted at PT Semen Gresik, Tbk. In the study, it was stated that individual characteristics have a significant effect on job satisfaction and organizational commitment. These employees are not easily affected by changes in the external environment because they already have positive personal values that become beliefs or beliefs and are automatically carried over in everyday life, including when they do their job.

Based on the results of the t-test, it can be seen in Table 4.10 that the characteristic t-test value is 4,762. This result states H0 is rejected (t-count > t-table) then H1 is accepted. The results of the hypothesis test show that job characteristics affect work engagement with a load factor of 0. 567, meaning that the better the job characteristic will increase work engagement.

The results of hypothesis testing show that job characteristics have a significant direct positive effect on work engagement in the company. The results of this study are in accordance with the results of research that has been carried out by Sonnentag (2017) that job characteristics are prototypical of work that can stimulate employee work engagemet. According to Khan's research (1990) job characteristics as long as they can foster meaningfulness, availability and safety in doing work will be able to give rise to work engagement.

CONCLUSION
Based on the results of research on the influence of LMX, personal resources, job resources and job characteristics on work engagement in PT Kokoh Semesta employees, it was concluded that:

1. The perception of PT Kokoh Semesta employees towards LMX is good, all dimensions are at a very high and high level of average. LMX shows that social interaction between employees is already quite good. The most influential dimensions of LMX are respect and trust. This shows that the trust and respect of subordinates to their superiors can form the best LMX.

2. The perception of PT Kokoh Semesta employees towards personal resources is good, all dimensions are at a very high and high level of average. Personal resources show that the confidence of employees with their abilities is good enough. The most influential dimensions of personal resources are self esteem and self efficiency. This shows that confidence in their ability and courage to make decisions in employees will form the best personal resources.

3. The perception of PT Kokoh Semesta employees towards job resources is good, all dimensions are at a very high and high level of average. Job resources show that employees understand what is being done and done should be good enough. The most influential dimensions of personal resources are the

interpersonal level and the organizational level. This shows that communication between fellow colleagues and superiors and having everything you have in the organization can form the best job resources.

4. The perception of PT Kokoh Semesta employees towards job characteristics is good, all dimensions are at a very high and high level of average. This average level indicates that respondents have good work design characteristics and indicates a high intrinsic motivation of employees.

5. The level of work engagement of PT Kokoh Semesta employees is at a high level. This level shows that employees have high enthusiasm and energy when working. This is also supported by the constituent dimensions, namely vigor, dedication, and absorption which also have a high average score.

6. The results showed that LMX, personal resources and job characteristics had a significant influence and positive influence on the work engagement of PT Kokoh Semesta employees. However, job resources have no effect on work engagement. The increase or decrease in authority, the presence or absence of social support and guidance from superiors has an influence on the level of work engagement at PT Kokoh Semesta but the influence is not significant.

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