

Effect of Psychological Capital and Authentic Leadership on Innovation Work Behavior

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Abstract -- This research aims to measure the effect of authentic leadership style and psychological capital on the innovative work behavior of a manufacturing company in Indonesia. Psychological capital also plays a role as a mediation between the relationship between authentic leadership and innovative work behavior. Data collection was carried out by simple random sampling to the 213 population. The returned and valid questionnaire results were 195 samples. Data processing was using the SEM method with SmartPLS 3.0 software. The results of this research are authentic leadership style and psychological capital have a positive and significant effect on innovative work behavior. Psychological capital as a mediator for the relationship between authentic leadership style and innovative work behavior. This novel research is proposing a model to enhance innovative work behavior among employees of a manufacturing company in Indonesia through authentic leadership practice and psychological capital. This research can pave the way to improve employee readiness in facing global business competition.

Keywords: Authentic leadership, innovative work behavior, psychological capital.

I. INTRODUCTION

Ideally, every employee can innovate and optimize their ability in working by creating such new and original ideas that can lead to company achievement. It will be hard to have innovation and achievement for the one who can't catch up with the change in the new era. Experts mentioned that employee has an important role in company development, so the company should consider the best employee to work (Asbari, Wijayanti, et al., 2020; Chidir et al., 2020; Goestjahjanti et al., 2020; Hutagalung et al., 2020; Ong et al., 2020; Silitonga et al., 2020; Sudiyono et al., 2020). Innovation is the key to company accomplishment, because it's where the new creative idea that can support the company (Agistiawati et al., 2020; Asbari et al., 2019; Asbari, Purwanto, Fayzhall, et al., 2020; Basuki, Asbari, et al., 2020; Prameswari et al., 2020; Putra et al., 2020).

Nevertheless, not all employees can show innovative work behavior and it will downgrading their work performance (Asbari, Purwanto, Maesaroh, et al., 2020; Hutagalung et al., 2020; Purwanto et al., 2020; Sopa et al., 2020b). Based on the problems that have been mentioned, it's known that when an employee or organization can't do some innovation it will harm their company performance. Some researchers also said that employee's innovative work behavior is important for the company and organization to have a dynamic business (Ganguly et al., 2019; Hartley & Rashman, 2018; Kaabi et al., 2018; Khalili, 2016; Sherine et al., 2019). A company should provide human resources that are excels and can work under pressure to get continuous success. This research will be conducted on one of manufacture companies in Indonesia.

Based on the result showed that some of employees have innovative work behavior in a form of idea generation which is a behavior to create idea, notion, and concept to do problem solving or to maintain performance with the goal of development. That shows that employee struggles to have innovative work behavior, although some of them are not. From the interview known that they can't show innovative work behavior when they have problems. The division chief said that when they do a evaluation meeting some of the employees refused to express their opinion and try to solve the problem. They only come to the meeting as formality. The chief try to understand that the lack of innovative work behavior exists because the employee is dislike his behavior which is always to the point.

There are some factors that cause innovative work behavior. Jingzhao (Li, & Zheng, 2014) stated that there are two factors that conjure innovative work behavior, external and internal (Li, & Zheng, 2014). External factor refers to environment condition and support from the leader. Meanwhile internal factor refers to factor that cause innovative work behavior from their individual innovative and ability to participate. There some research results which mentioned external factors like leadership style can stimulate innovative work behavior (Prameswari et al., 2020; Purwanto et al., 2020; Waruwu et al., 2020). Some researches also stated that there is significant effect between transformational leadership towards innovative work behavior (Purwanto et al., 2020). That study showed that transformational leadership give positive impact for innovative work behavior. Transformational leadership motivates employee to achieve organization goals (Asbari, 2020; Basuki, Novitasari, et al., 2020; Goestjahjanti et al., 2020; Novitasari et al., 2020; Silitonga et al., 2020; Sudiyono et al., 2020; Zaman et al., 2020). In short, transformational leadership is a leadership style that able to increase work performance and innovative work behavior. That thing showed that authentic leadership also will give huge impact for innovative work behavior because authentic leader has a transformational leadership way. Avolio et al. (2004) explained that authentic leadership is a combination from transformational leadership and ethic leadership, where a leader is not only motivates the employee but also show an action to create positive atmosphere a long their working space to get a credibility and trust from the employee (Avolio et al., 2004). Walumbwa, Avolio, Gardner, Wernsing dan Peterson (2008) also explained that authentic leadership is able to enhance attachment and employee's satisfaction, and strengthen the positive identity. Leadership is one of the factors which is a thing that people will face directly, so it really affects employee's behavior (Walumbwa et al., 2008).

Based on the things above, authentic leadership is an important leadership to be implemented in an organization. Authentic leadership can motivate the employee to improve their work performance and create such a positive situation in the working space. Innovative work behavior will lead to work gratification and employee's confidence towards their leader will stimulate their employee to give a feedback for the leader and company (Agistiawati et al., 2020; Hutagalung et al., 2020). Innovative work behavior and the improvement of work performance are good for the company to maintain their quality to be able to compete with the competitor. Research showed that internal factor like psychological capital also can stimulates innovative work behavior. Some researchers conducted a research about the relation between psychological capital and innovative work behavior in working place (Rego et al., 2012; Zubair & Kamal, 2017). The result showed a positive and significant correlation between the two variables. Psychological capital has an effective contribution towards innovative work behavior.

Psychological capital according to Luthan, Avolio, Avey, and Norman (2007) is a psychological approach in working place that is used to catch individual's psychology capacity that can be measured and developed for work improvement (Luthans et al., 2007). Someone who can optimize psychological capital can help their selves to improve their performance, for the example when they has belief so they can take the chance to be success. It showed that psychological capital is an important thing to improve innovative work behavior that can lead to individual and group's success. It is similar to Luthan, et al. (2007) that psychological capital that is expanded can lead to good work performance. The researcher keen on know more about the relation between authentic leadership and psychological capital with innovative work behavior.

II. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Innovative Work Behavior

According to De Jong and Den Hartog (2008) innovative work behavior is a behavior that is directed to apply changes, new knowledge, create new ideas, and fix working process to improve work performance. Kleysen and Street (2001) defined innovative work process as a whole individual behavior that pointed at appearance, introduction, and implementation of new and profitable things (Kleysen & Street, 2001). Some new and profitable things include product idea development or technology, changes in administrative procedure which intend to improve work relation or implementation of new ideas and technology for significantly increase the effectiveness and efficiency in working. Innovative work behavior encourages performance and develop organizational competition to achieve the target. Innovative work behavior as one of organizational behaviors is a result from individual as employee, group as the work process, and organizational process as a management practical relation. Innovative work behavior is an individual ability to do some changes like adopt new work procedure, practice, technique to finish and fulfill the work (Rego et al., 2012). Innovative work behavior is also defined as individual action to create and adopt ideas or opinion, and new ways to solve their works (Gaynor, 2001). Based on a brief literature review, it can be defined that innovative work behavior is a whole individual

action that leads to apply changes, introduction, and implementation of something new, and a process to improve work performance with the aims to improve both individual and group work performance.

De Jong and Den Hartog (2008) explained four aspects of innovative work behavior: (1) Opportunity Exploration. A behavior that explore new opportunity by identified event or the ap, identified jigsaw that needed to be solve, identified the problems that needed to be respond. For example is think and try to solve the task. (2) Idea Generation. A behavior that creates idea and concept to solve problems or improve work performance with the aims of development. For example, find alternative solution to solve problems. (3) Championing. An effort to implement creative ideas and apply it on work. For example, influence others to be enthusiast with the new ideas and support the ideas. (4) Application. A behavior to apply idea and fix product or procedure, and an action to develop, examine, and sell the innovative ideas. For example, promote the new ideas development to others. Researcher use the aspect from De Jong and Den Hartog (2008). Those aspects are opportunity exploration, idea generation, championing, and application.

Authentic Leadership

According to Walumbwa et al. (2008) authentic leadership is a behavior which represent a leader who utilizing his ability in a good way. Whether by positive psychology capacity, positive ethic, self awareness, appropriate behavior, a balance information processing, and transparent relation, and encourage himself. Authentic leadership improves engagement and employee satisfaction, and strengthen employee's identity. Avolio et al. (2004) defined that authentic leadership is a combination from transformational leadership and ethic leadership, where an authentic leader behave by a particular belief to get the credibility and employee's trust, and build a work team. As a result, authentic leadership is a process to build legitimacy or leader obligation through honesty, respect all the inputs from employee, and built by ethic.

Based on the experts' opinion, authentic leadership is leader who has ability to utilize and promote his ability like high self awareness, ethic, and appropriate norm. The aims are to influence the employee, create good environment and positive relation to get the trust from employee. Employee's gratification becomes a standard for employee to do innovation and give feedback to the leader and organization.

Walumbwa, et al. (2008) explained that there are for aspects of authentic leadership: (1) Self-awareness. Self-awareness is somebody's way to look at themselves, try to understand themselves, and able to look the world by the process. Knowing their strength and weakness, so that they realize what impact will they give to other. For example, encourage employee to present their opinions. (2) Relational transparency. Relational transparency is a behavior to naturally present their selves. Such behavior is the disclosure of various information openly, and shows the expression of real thoughts and feelings, thereby inflicting trust from others on him through such openness. For example, expressing emotions that correspond to prevailing feelings and values without any being hidden. (3) Balanced processing. Balanced processing is a leader's behavior that shows that they analyze all data relevantly and objectively before making a decision. The leader also asks for the views of others, as well as receiving input and criticism from others who oppose his opinions. For example, making decisions objectively and being willing to accept input from others. (4) Internalized moral perspective. Internalizing a moral perspective is a person's ability to control or regulate himself or herself. Such self-arrangement is in accordance with the internalized and inregregrated moral values in accordance with the morals of the group, organization and society. Thus resulting in decision-making in accordance with internalized moral standards. For example, being able to control actions and speech, because the individual realizes that certain speech and actions can have an impact on others. Based on the above description, in this study researchers used aspects of Walumbwa, et al. (2008). These aspects are self-awareness, relational transparency, balanced processing and internalized moral perspective.

Psychological Capital

Psychological capital is a positive psychological approach in the field of psychological science. According to Luthan, et al. (2007) Psychological capital is a conceptual model of positive approach in the workplace known as positive organizational behavior (POB) theory. Luthan, et al. (2007) developed a psychological capital or better known as PsyCap to capture the psychological capacity of individuals who can be measured, developed and utilized for performance enhancement. Psychological capital is an approach characterized by dimensions that can optimize the potential that individuals have so as to help the organization's performance (Luthans et al., 2007; Rego et al., 2012; Zubair & Kamal, 2017. These dimensions are self-efficacy, hope, optimism, and resiliency. By definition Luthan, et al. (2007) it can then be formulated that psychological capital is the positive psychological capital that exists in a person, such as self-efficacy, hope (hope), optimism (optimism), and

resiliency (resilience), such positive psychological capital can be developed optimally. Optimizing these positive psychology models will help a person in improving performance. So as to foster innovative behavior supported by the attitude of optimism and confidence of employees in completing the task at hand.

Luthan, et al. (2007) explains that psychological capital has characteristics in individuals such as self efficacy, hope, optimism, and resiliency. The explanation is as follows: (1) Self-efficacy. Self-efficacy is self-confidence to be able to take every opportunity as a form of effort to achieve success in challenging tasks. For example, feel confident in finding a solution to a problem that is being faced or a long-term problem. (2) Hope. Hope is perseverance in achieving goals, being able to see opportunities or opportunities that can be achieved, and raising hopes for success. For example, believing that there are many ways out in every problem. (3) Resiliency. Resilience is an individual's ability to overcome life's challenges and maintain them. Where when an individual experiences problems and various problems then the individual is able to solve them, and solve them to make changes and achieve success. For example, being able to solve difficult problems in every job. (4) Optimism. Optimism is one's ability to create positive attributes within themselves to achieve success in challenging tasks. For example, think positively about work-related matters. Based on the above description, in this study researchers used aspects of Luthans, et al. (2007). These aspects are self-efficacy, hope, resiliency and optimism.

The Relationship between Authentic Leadership, Psychological Capital and Innovative Work Behavior

Innovative work behaviors are behaviors geared towards implementing change, applying new knowledge, creating new ideas and improving work processes to improve personal or group performance (De Jong & Den Hartog, 2008). Innovative work behavior is the behavior required by a person to develop self-competence in order to achieve the goals set by the individual himself or the goals set by the organization in which the individual works. There are two factors that can influence the emergence of innovative work behaviors, namely external factors and internal factors (Dhar, 2016; Kang et al., 2016; Liu, 2017; Newman et al., 2018; Önhon, 2019). Leadership is an external factor of innovative work behavior, Jingzhao (Li & Zheng, 2014). One of the leaderships that is expected to stimulate employees to innovate is authentic leadership (Li & Zheng, 2014). Walumbwa, et al. (2008) defines authentic leadership as a pattern of behavior that describes a leader who makes good use of his abilities. Both in terms of positive psychological capacity building, positive ethical climate, high self-awareness, moral behavior, balanced and transparent information on relationships, and being able to encourage positive self-development. Authentic leadership is able to increase subordinate satisfaction and strengthen the identity of subordinates positively towards the organization. An organization that implements authentic leadership will be able to foster innovative behavior in employees. Innovative work behavior in employees can increase employee performance productivity, and be able to bring creative ideas, so that employees will be more productive in work. Walumbwa, et al. (2008) explains that there are four aspects of authentic leadership. The first aspect is self-awareness, where self-awareness is the way a person sees himself, the ability to understand one's own self, the ability to define the world from the process that has been gone through, and the ability to understand the strengths and weaknesses that he or she has, thus one is able to realize the impact of himself on others. For example, a leader is willing to admit his or her mistakes and always motivate employees to come up with their ideas. Employees who have a high perception of the self-awareness that the leader has then the employee feels that the leader is able to provide motivation to continue to develop. Work motivation is related to innovative behaviors, where when employees are motivated to work, then the employee will be more antusias in completing tasks, one of which is by finding solutions in getting the job done, so as to improve the performance of the work. This is in line with research conducted by (Devloo et al., 2015; Saether, 2019) which says that motivation is able to improve innovative work behavior, motivation will increase employee interest in work, in addition motivation is a tool to activate certain abilities in achieving performance and is a tool to develop the skills that are possessed in order to master tasks in the future.

The second aspect is the transparent relationship that is the behavior of bringing up the actual self without being created. Such behavior is the disclosure of various information openly, and shows the expression of real thoughts and feelings, thereby inflicting trust from others on him through such openness. For example, the boss will express emotions that correspond to his or her perseverance, in addition the dreamer will act consistently according to his beliefs. Employees who have a high perception of the transparent relationship that the leader has, then the employee realizes that the leader will not hide something detrimental, so it will give confidence to the leader and not close the possibility of the leader becoming a role model and being a role model for the employee. Leaders who become role models can encourage employees to innovate in order to become like their leaders, one of them by presenting the results of thought or innovation to other employees, and i want to convince other employees that ideas or innovations are acceptable and supportive topliable the idea. This is in line with research conducted by (Che et al., 2019) which said that transparency will increase employee motivation in work, one of which is transparency related to the rewards system. Highly motivated employees

will bring up innovative work behaviors, it is conveyed by (Devloo et al., 2015; Saether, 2019) who says that motivation is able to improve innovative work behavior.

The third aspect is balanced processing of leader behavior that shows that they analyze all data relevantly and objectively before making a decision. The leader also asks for the views of others, as well as receiving input and criticism from others who oppose his opinions. For example, leaders have objective and relevant judgments before making decisions, and are willing to receive feedback and criticism from others. Employees who have a high perception of the balanced processing that the leader has, then the employee believes that the emmpin will act fairly and objectively, so that the employee feels equalized with other employees, so that the employee is more passionate in working and optimizing his ability to achieve the specified goals. The spirit of work will spur employees to bring about innovation behavior, one form of innovation in the form of the search for new work methods/ techniques, or new work instruments to support the completion of the work. This is in line with research conducted by (Kim & Brymer, 2011; Okan & Akyüz, 2015) which says that ethical leaders or leaders who conduct policies objectively will increase employee job satisfaction, the job satisfaction is dreamed up by improving and developing work performance.

The fourth aspect is the internalization of the moral perspective that is the ability of the leader in controlling or regulating himself. Such self-arrangement is in accordance with the internalized and inregregrated moral values in accordance with the morals of the group, organization and society. Thus resulting in decision-making in accordance with internalized moral standards. Employees who perceive their leaders as having an internalized moral perspective, then the employee will be reluctant and respectful of the leader, so that the employee will also reciprocate by carrying out the leader's orders, working as best he can, and trying to develop his or her ability to work. The development of these capabilities can be in the form of improving the implementation of previous tasks that are considered less maximal, then finding alternative solutions, thus the employee has brought up work behavior. It is also in line with research conducted by (Kim & Brymer, 2011) which said that leaders who uphold moral values or so-called ethical leaders will increase employee job satisfaction, job satisfaction is dreamed up by improving and developing work performance. The above description corresponds to research conducted by (Purwanto et al., 2020; Waruwu et al., 2020), which states that there is a significant influence between transformational leadership and innovative behavior. Transformational leadership is part of authentic leadership.

Avolio explains that authentic leadership is a combination of transformational leadership and ethical leadership, so authentic leadership is thought to also be associated with innovative behavior. Jingzhao (Li & Zheng, 2014) explains that there are internal factors that can give rise to innovative behavior in a person. An internal factor that researchers consider capable of bringing about innovative behavior in employees is the psychological capital of psychological capital. According to Luthan, et al. (2007) Psychological capital is a positive capital that exists in a person, such as self-efficacy, hope, optimism, and resiliency, such positive psychological capital can be developed optimally. Optimizing these positive psychology models will help a person in improving performance both individually and organizationally. An organization needs highly dedicated and intellectually capable employees in order to get the job done. A person who has positive psychological capital and optimizes his or her potential has the most likely to achieve success, both in daily life, and improve performance in the workplace. Luthan, et al. (2007) explains that there are four aspects of psychological capital.

The first aspect is self-efficacy or confidence that is self-confidence to be able to take every opportunity as a form of effort to achieve success in challenging tasks. Employees who perceive themselves as confident in themselves, then the employee is confident in taking every opportunity and taking advantage of the opportunities that exist. Employees who are able to take advantage of existing opportunities, such as finding new work methods or work instruments to support their ability to work, then those employees have demonstrated innovative behavior. When it is implemented optimally it will develop its capabilities, so as to achieve success. So it is very related to innovative behavior, where employees should be able to see the opportunities that exist to be able to develop their skills. This is in line with research conducted by Aditya and Ardana (2016) which said that self-efficacy will improve innovative work behavior, in which a person who has self-efficacy in him will be able to develop work innovations.

The second aspect is hope that is perseverance in achieving goals, being able to see opportunities or opportunities that can be achieved, and raising hopes of achieving success. Employees who perceive themselves as having hope in him, will encourage him to work harder so that his wishes can be achieved. This is very much related to innovative behavior, where employees should be able to see existing opportunities and be goal-oriented. In addition, it can be seen when employees are looking for ways to improve the quality of work by bringing up original ideas and alternative problem solving solutions as well as for development purposes. This

is in line with research conducted by Turek (2012) which explained that hope can stimulate employees to start activities and to achieve fixed goals by applying creative ideas in achieving goals (Wojtczuk-Turek, 2012).

The third aspect is resilience which is the ability of individuals to overcome life's challenges and maintain them. Where when an individual experiences problems and various problems then the individual is able to solve them, and solve them to make changes and achieve success. Employees who perceive themselves as having resilience, then the employee is able to solve problems and able to make changes, so that they will be able to withstand the pressures that exist in the workplace. This is very much related to innovative behavior, where employees must be able to make positive changes, both self-change and way of working, in order to survive in the work environment. These positive changes can be seen when employees contribute to the appearance of new ideas, solutions and how the task is done. This is in line with research conducted by (Rego et al., 2012) which said that psychological capital will stimulate the emergence of innovative behaviors in employees, thus being able to improve employees' work performance.

The fourth aspect is the optimistic attitude that is one's ability to create positive attributes within themselves to achieve success in challenging tasks. Employees who perceive themselves as optimistic will have the power to motivate themselves to work better. This is very much related to innovative behavior, where employees who are motivated to achieve goals will continue to try new things to achieve their specified goals. The appearance of the new thing can be the appearance of new working methods, ways of solving problems and other things related to self-development and organizational development. This is in line with research conducted by (Rego et al., 2012) which said that optimism will stimulate innovative work behavior in employees. Employees who do not have innovative behavior will have negative impacts, such as declining performance productivity, decreased turnover in an organization, decreased service to customers so as to get complaints from customers, and prevent an organization from growing and achieving the desired goals.

Based on some of the things that have been conveyed, it can be concluded that there is a relationship between authentic leadership and psychological capital and innovative behavior. Innovative behavior will arise when there are external factors in the form of authentic leadership, and internal factors in the form of psychological capital. The application of psychological capital and authentic leadership in an organization can foster a spirit of work in employees, thus encouraging employees to conduct innovative behaviors. Therefore, researchers hypothesize:

- H1. Authentic leadership has a significant effect on psychological capital.*
- H2. Authentic leadership has a significant impact on innovative work behaviors.*
- H3. Psychological capital has a significant effect on innovative working behaviors.*

Conceptual Research Framework

To prove the hypothesis and analyze the data from this study, the conceptual framework of this research was drawn up as in Picture 1.

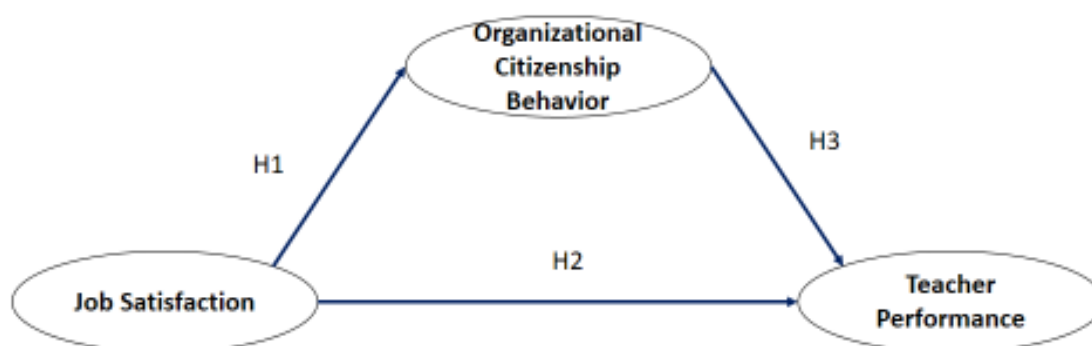


Figure 1. Research Model

III. RESEARCH MODEL

Operational Definitions of Variables and Indicators

The method used in this study is a quantitative method. Data collection is done by circulating the questionnaire to all employees from the manufacturing industry. Instruments used to measure authentic leadership are measured from instruments adapted from the ALQ scale (Authentic Leadership Questionnaire) according to (Walumbwa et al., 2008). The scale is based on four aspects: self-awareness, relation transparency, balanced processing, and internalized moral perspective. The authentic leadership scale consists of 16 items (AL1-AL16). Psychological capital is adapted from the PCQ scale (Psychological Capital Questionnaire) according to (Luthans et al., 2007). The scale is based on four aspects, namely self efficacy, hope, optimism, and resiliency. The psychological capital scale consists of 24 items (PC1-PC24). Innovative work behavior is adapted from the Innovative Work Behavior scale based on theoretical studies (Jong & Hartog, 2008). The scale is based on four aspects, namely Opportunity Exploration (exploring opportunities), Generativity (idea appearance), Championing (manifesting), Application (applying ideas). The innovative behavioral scale consists of 10 items (IWB1-IWB10). Polls are designed to be closed except for questions/statements about the identity of respondents in the form of semi-open polls. Each closed question/statement item is given five answer options, namely: strongly agree (SS) score 5, agree (S) score 4, disagree (KS) score 3, disagree (TS) score 2, and strongly disagree (STS) score 1. The method for processing data is by PLS and using SmartPLS software version 3.0 as its tool.

Population and Samples

The population in this study is all employees in one of the manufacturing industries in Indonesia which number 213 people. Questionnaires are distributed electronically with simple random sampling techniques. The return and valid questionnaire results were 195 samples. So 91.5% of the total population.

IV. RESEARCH RESULT AND DISCUSSION

Sample Description

Table 1. Sample Description Information

Criteria		Total	%
Age	< 30 years	41	21%
	30 - 40 years	144	74%
	> 40 years	10	5%
Working time as employee	< 5 years	130	67%
	5-10 years	45	23%
	> 10 years	20	10%
Highest Education	Bachelor Degree	53	27%
	Senior High School	142	73%

Validity and Reliability Test Results of Research Indicators

The testing phase of the measurement model includes convergent validity testing, discrimination validity. While to test construct reliability used cronbach's alpha and composite reliability values. The results of the PLS analysis can be used to test the research hypothesis if all indicators in the PLS model have qualified convergent validity, deskriminan validity and reliability test.

Convergent Validity Testing

The convergent validity test is carried out by looking at the loading factor value of each indicator against its construct. In most references, a factor weight of 0.5 or more is considered to have validation strong enough to explain a latent construct (Chin, 1998; Ghozali, 2014; Hair et al., 2010). In this study the minimum limit of

loading factor received was 0.5, provided the AVE value of each construct > 0.5 (Ghozali, 2014). Based on the results of SmartPLS 3.0 processing, and after indicator items below 0.5 are discarded, now all indicators have a loading factor value above 0.5 and an AVE value above 0.5. Thus, the convergent validity of this research model is already qualified. The loadings, cronbach's alpha, composite reliability and AVE values of each more construct can be seen in Table 2 below:

Tabel 2. Items Loadings, Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE)

Variables	Items	Loadings	Cronbach's Alpha	Composite Reliability	AVE
<i>Authentic Leadership</i> (AL)	AL2	0.762	0.891	0.910	0.506
	AL3	0.745			
	AL6	0.630			
	AL9	0.651			
	AL10	0.694			
	AL11	0.677			
	AL12	0.643			
	AL13	0.851			
	AL14	0.760			
Pschicological Capital (PC)	PC2	0.651	0.930	0.939	0.511
	PC3	0.843			
	PC4	0.836			
	PC5	0.771			
	PC6	0.812			
	PC7	0.706			
	PC8	0.655			
	PC9	0.700			
	PC11	0.652			
	PC14	0.631			
	PC15	0.738			
	PC16	0.625			
Innovative Work Behavior (IWB)	IWB2	0.725	0.887	0.910	0.562
	IWB3	0.672			
	IWB5	0.681			
	IWB6	0.863			
	IWB7	0.666			
	IWB8	0.782			
	IWB9	0.845			
IWB10	0.735				

Discriminant Validity Testing

Discriminant validity is performed to ensure that each concept of each latent variable is different from other latent variables. Models have good discriminant validity if the ave squared value of each exogenous construct (value on diagonal) exceeds the correlation between the construct and the other construct (value below diagonal) (Ghozali, 2014). The results of the discriminant validity test using ave squared values, i.e. by looking at the Fornell-Larcker Criterion Value obtained as mentioned in Table 3. The results of the deskriminan validity test in table 3 show that the entire construct already has an AVE square root value above the correlation value with other latent constructs (through the Fornell-Larcker criteria) so it can be concluded that the model has met the validity of the decriminal (Fornell & Larcker, 1981).

Construct Reliability Testing

Construct reliability can be assessed from cronbach's alpha value and composite reliability of each construct. The recommended composite reliability and cronbach's alpha values are more than 0.7 (Ghozali, 2014). The reliability test results in table 2 above show that the entire construct already has a composite reliability value and Cronbach's alpha is greater than 0.7 (0.7). In conclusion, the entire construct has fulfilled the required reliability.

Hypothesis Testing

Hypothesis testing in PLS is also referred to as the inner model test. These tests include tests of the significance of direct and indirect influences as well as measurements of the large influence of exogenous variables on endogenous variables. Influence tests are conducted using t-statistical tests in a partial least squared (PLS) analysis model using the help of SmartPLS 3.0 software. With booth strapping techniques, R Square values and significance test scores are obtained as shown in the table below:

Table 3. Discriminant Validity

Variables	AL	WIN	PC
Authentic Leadership (AL)	0.711		
Innovative Work Behavior (IWB)	0.557	0.750	
Psychological Capital (PC)	0.536	0.719	0.715

Table 4. R Square Value

	R Square	R Square Adjusted
Innovative Work Behavior (IWB)	0.558	0.543
Psychological Capital (PC)	0.287	0.275

Table 5. Hypotheses Testing

Hypotheses	Relationship	Beta	SE	T Statistics	P-Values	Decision
H1	AL -> PC	0.536	0.081	6.630	0.000	Supported
H2	AL -> IWB	0.241	0.121	1.988	0.047	Supported
H3	PC -> IWB	0.589	0.095	6.231	0.000	Supported

Based on Table 4 above, the value of R Square psychological capital (PC) is 0.287 which means that the psychological capital variable (PC) can be explained by an authentic leadership variable (AL) of 28.7%, while the remaining 71.3% is explained by other variables not discussed in this study. Meanwhile, the R Square innovative work behavior (IWB) value of 0.558 means that innovative work behavior (IWB) variables can be explained by authentic leadership variables (AL) and psychological capital (PC) of 55.8%, while the remaining 44.2% is explained by other variables not discussed in this study. While Table 5 displays T Statistics and P-Values that show the influence between the research variables mentioned.

Discussion

The Influence of Authentic Leadership on Psychological Capital

From the hypothetical test results mentioned in Table 5, it can be known that there is a positive and significant influence of authentic leadership on psychological capital. This is evidenced by a p-value of 0.000 ($P < 0.05$). The resulting coefficient was 0.536 positive with a t-statistic of 6,630. This means that the first hypothesis of this study was accepted (H1 was accepted). This research is in line with previous research conducted by (Rego

et al., 2012), which stated that authentic leadership is positively correlated and has a significant effect on the psychological capital of employees.

The Influence of Authentic Leadership on Innovative Work Behavior

From the hypothetical test results mentioned in Table 5 it is known that there is a positive and significant influence of authentic leadership on innovative work behaviors. This is evidenced by a p-value of 0.047 ($P < 0.05$). The resulting coefficient was 0.241 positive with a t-statistic of 1,988. This means that the second hypothesis of this study is accepted (H2 is accepted). The positive relationship between authentic leadership and innovative work behavior is in line with the theory conveyed by (Avolio et al., 2004) authentic leadership is able to increase subordinate satisfaction as well as strengthen the identity that subordinates positively have towards the organization. Based on this, it can be said that authentic leaders are able to increase and grow employee satisfaction and confidence, where employee satisfaction with the behavior of leaders to employees is able to cause reciprocal behavior from employees towards the leader as well as towards employees. Such reciprocity can be positive behaviors such as being motivated to improve performance and bring up and develop innovative behaviors. This is evident in this study, where by authentic leaders, karyawan will bring about innovative behaviors such as improving the ways of carrying out tasks, bringing up new work ideas or techniques to improve quality, finding alternative solutions to solve problems, being able to attract the sympathy of other members of organizations to support the methods or innovations that are being created, being able to apply these new innovations in the world of work, and being able to commercialize the results of those innovations. (Avolio et al., 2004; Rego et al., 2012) explains that authentic leadership is a combination of transformational leadership and ethical leadership. Thus authentic leadership will relate to innovative work behaviors.

The Influence of Psychological Capital on Innovative Work Behaviors

From the hypothetical test results mentioned in Table 5 it can be known that there is a positive and significant influence of authentic leadership on psychological capital. This is evidenced by a p-value of 0.000 ($P < 0.05$). The resulting coefficient was 0.589 positive with a t-statistic of 6,231. This means that the third hypothesis of this study is accepted (H3 is accepted). Furthermore the positive relationship between psychological capital and innovative working behavior is in line with the theory presented by Luthan, et al. (2007) which revealed that psychological capital can be utilized to improve performance. In this study, employee performance improvement can be seen from the resolution and appearance of alternative solutions to solve problems. In addition, the results of this study are also in line with the opinions of the following researchers who stated that the dimensions in psychological capital if developed optimally will be able to optimize the positive potential that individuals have so as to help the performance of individuals and organizations (Abbas & Raja, 2015; Hsu & Chen, 2017; Sun & Huang, 2019). This is evident in this study where the employee who feels confident that he or she has the potential to develop will be motivated to show that potential, so that it will bring about innovative behavior in the employee. Another thing that shows that employees have innovative work behavior is that employees feel able to handle the problems at hand, that feeling able can encourage employees to develop their skills and come up with new ideas to solve the task at hand. The above description is in line with research conducted by (Rego et al., 2012) which explains that psychological capital has a positive and significant influence on innovative work behaviors in the workplace i.e. the higher the individual has psychological capital in him then the higher the innovative work behavior that will be raised.

V. CONCLUSION

The results of this study show that authentic leadership and psychological capital are influential and can be predictors of employees' innovative work behaviors. Furthermore, there is a positive correlation between authentic leadership and employee innovative work behavior, as well as a positive correlation between psychological capital and employee innovative work behavior. This shows that the higher the employee's perception of authentic leadership of the employer then the higher the innovative work behavior. The higher the employee's perception of psychological capital, the higher the innovative work behavior. This suggests that the research hypothesis is accepted.

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