

The Influence of Competence and Intrinsic Motivation on Innovative Behaviour Through Work Meaningfulness, as a Mediator, of the Employees of the Education Units of the Ministry of Industry in West Sumatera

Hermawan Setyadhi¹, Erni Masdupi², Syahrizal³

^{1,2,3}*Universitas Negeri Padang, Padang, Indonesia,*

¹ **Corresponding author. E-mail: adeehermawan13@gmail.com*

ABSTRACT

This study aims at examining the significance of the influence of competence and intrinsic motivation on innovative behavior with work meaningfulness as a mediator for employees of the education units of the Ministry of Industry in West Sumatera. This study used a causality approach with a total sample of 152 respondents who were selected using a proportional random sampling technique. The results of the study prove that: (1) Competence has no significant effect on innovative behavior; (2) Intrinsic Motivation has a significant effect on Innovative Behavior; (3) Competence has a significant effect on work meaningfulness, (4) Intrinsic motivation has a significant effect on work meaningfulness 5) work meaningfulness has a significant effect on innovative behavior, 6) Work meaningfulness becomes a mediator of the influence of competence on innovative behavior, and 7) Work meaningfulness becomes a mediator of the influence of intrinsic motivation on innovative behavior

Keywords: *Competence, Intrinsic Motivation, Meaningfulness of work, Innovative behavior*

1. INTRODUCTION

Beureaucratic change is an critical angle in organizing government administrasion since it lies on arrangement which is additional decided by the administravive capacity inside the government itself to execute the approach effectively and viably. In arranging for the approach to be actualized, competence human assets are required.

In order for policies in the government bureaucracy to be carried out well, new innovations from each employee are needed. Innovation is an individual action directed at the interests of the organization in which beneficial new ideas are introduced and applied [1]. Besides having to have innovation, employees are also required to have innovative behavior. Employees with a high innovative behaviour are of vital importance for the agency. It is to enable progress and job targets from the agency. The education unit of the Ministry of Industry is one of the fields Amongst the institutions with a high competition level is the education unit of Ministry of Industry. Hence, creating ideas that are innovative is always required to performed by the each employee to allow the work produced is able to achieve the target of

the education unit and has more value than other Ministry education units.

Based on observations made by researchers from January to March 2020 at the Padang Industrial Training Center work unit. In making observations, the researcher uses an observation protocol which includes, 1) observed aspects, 2) observation targets, and 3) observation procedures, the results show that employees are more likely to work based solely on their main tasks and functions and lack of new ideas, lack of ideas. new employees submitted by employees for the progress of the organization, only a few employees presented ideas for organizational progress, and There was no employee motivation to carry out the ideas described by their colleagues.

To understand the innovative behavior of the employees of the Education Unit of the West Sumatera Ministry of Industry, researchers refer to previous studies. Several researchers have found that employees' innovative behavior is triggered by leadership, personality, motivation, skills, and job attitudes. Motivation factors are the main factors that can trigger positive behavior, such as innovative behavior. [2] motivation is a process that determines the intensity,

direction and provisions of an individual in an effort to achieve goals. Motivation is the most important thing in encouraging employee morale in doing a job. In order to achieve agency goals, employees need motivation to be enthusiastic about working but in reality what happens in the field is still not what is expected by the education unit of the Ministry of Industry in West Sumatera.

Another factor that is thought to have a strong influence on innovative behavior is employee competence. [3], competence is characteristics related to superior and / or creative performance in work. Competency knowledge really helps the company to find out the extent to which an employee can work optimally and make a contribution according to the company's wishes. [4] competence in information, aptitudes, and capacities that are aced by somebody who has ended up a portion of him, so that he can preform cognitive, full of feeling and psychomotor behaviors as well as conceivable. Competent employees can carry out their assigned tasks in accordance with existing guidelines and procedures. With the competence possessed, employees can always behave innovatively so that the purpose of the agency to serve the community can run well.

In creating innovative behavior and intrinsic motivation and competence, it is also seen from the meaningful-work factor. It's just that previous research has focused more on competency outcomes and intrinsic motivation, such as organizational commitment, individual performance, and job engagement. This means that the way of competence and intrinsic motivation through meaningful work has not been tested. Even though it is very important to study whether employees at the Education Unit of the Ministry of Industry in West Sumatera who have intrinsic competence and motivation will increase the meaning of work which then has an impact on innovative behavior. This study will also test empirically that the competence and intrinsic motivation of employees of the Education Unit of the Ministry of Industry in West Sumatera is a way to make employees more meaningful at work. Employees who are competent at work can optimize their duties.

Referring to the above background, the authors are interested in examining deeper to see "The Influence of Competence and Intrinsic Motivation on Innovative Behavior with the Meaning of Work as a Mediator for Employees of the Education Unit of the Ministry of Industry in West Sumatera.

To support this research, the author included some theories. Self-Determination Theory is a mental attitude characterized by a strong commitment to achieving certain goals despite obstacles and difficulties; a process in making decisions, reaching conclusions, or ensuring the final result of each process [5]. [6] Innovative behavior is defined as a whole individual action that leads to the emergence, introduction, and application of something new and beneficial at all levels of the

organization. Innovative behavior is often associated with creativity.

Innovative Behavior

[6] revealed that innovative behaviour can be described as a full action an individual which leads to the introduction, emergence, and implementation of new and beneficial ideas in the organization within all levels. Innovative behavior is often associated with creativity. The two things are indeed related, but the constructs of innovative behavior and creativity have various differences [7]. Creativity can be said to be the initiation of the innovation process when performance problems or gaps are identified and ideas emerge in response to a need for innovation [7] Innovative behavior focuses on more complex processes because innovative behavior extends to the application of the resulting ideas [8]. [9], the effectiveness of innovative behavior will be achieved if the basic motives of workers, such as competence-autonomy and the desire to build social synergies, can encourage for workers to be able to explore new ideas. Innovative behavior as an individual action to create and adopt new ideas or thoughts or ways applied in the implementation and completion of work [10]

Intrinsic Motivation

Intrinsic Motivation is [11] intrinsic motivation comes from within the individual. This motivation results in the integrity of the goals, both organizational goals and individual goals, both of which can be satisfied. Intrinsic motivation is an important thing for the development of cognitive openness, they express intrinsic motivation as the act of doing an activity for satisfaction. Furthermore, employees find that what they are doing is fun and interesting, they will have a desire to exert considerable effort to do their job in the organization. [12] states that there are a number of indicators of intrinsic motivation 1) achievement, 2)recognition, 3)work it self, 4) responsibility, 5) advancement. [13] the factors of innovative behavior cannot be separated from three interrelated aspects, namely: 1). Individual Factor, 2). Psychological Factors, 3). Organizational Factors

Competence

The terms competencies, 'competence' and 'competent' which in Indonesian are translated as competence, proficiency, and empowerment which refer to a state of capable and appropriate quality. The English dictionary defines the word 'competence' as being appropriate, adequate, or suitable. [14] states that "competence is a fundamental characteristic of a person that has a direct effect on performance, or can predict excellent performance". [15] suggests that competence is a basic characteristic of a person that allows him to provide superior performance in certain jobs, roles, or situations. indicators of work competence [16] are work experience, educational background, knowledge, skills

- 1). Work experience, 2). Education, 3). Knowledge, 4.) Skills

The meaning of work

Work meaningfulness is looking for a purpose in work and is a bigger thing than extrinsic results in work. Meaningfulness of work is defined as a person's perception of his or her job which provides a role as a provider of higher goals [17]. With the meaning of work in a person, then there is someone's confidence in him about his role in his job. The indicators of the meaningfulness of work refer to the opinion of [18], namely: 1). Work, 2). Career, 3). Calling. There are 3 (three) aspects of the meaning of work [19], namely: 1). Positive meaning in work, 2). Meaning making through work, 3). Greater good motivation.

The conceptual framework is a frame of reference used in order to clarify the conduct of research and as a basis for understanding research. In this study, it can be described that competence affects innovative behavior because when a person has the required competencies according to his job he can provide creative ideas for organizational progress, as well as intrinsic motivation, when someone has high motivation in him work optimally and contribute to implementing the ideas that exist in him so that intrinsic motivation can influence innovative behavior.

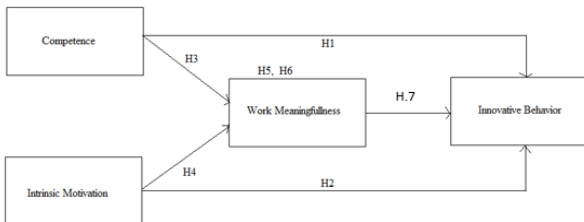


Figure 1 Conceptual framework

Based on the background of the problem, the formulation of the problem, the research objectives and the study of the theory and conceptual framework above, a hypothesis can be formulated which is a temporary answer to the research problem. The hypothesis in this study is as follows:

1. Competence affects the innovative behavior of employees of the Education Unit of the Ministry of Industry in West Sumatera.
2. Intrinsic motivation affects the innovative behavior of employees of the Education Unit of the Ministry of Industry in West Sumatera.
3. Competence affects the meaning of work of employees at the Education Unit of the Ministry of Industry, West Sumatera.

4. Intrinsic motivation affects the work meaning of employees at the Education Unit of the Ministry of Industry, West Sumatera.
5. Work Meaningfulness affects the innovative behavior of employees of the education unit of the Ministry of Industry in West Sumatera
6. Work meaningfulness becomes a mediator due to its effect toward innovative behaviour of the education unit of the Ministry of Industry in West Sumatera.
7. Work meaningfulness mediates the impact of intrinsic motivation of the Ministry of Industry in West Sumatera.

2. METHODS

The research design that the author uses is causality research. Where the authors want to see whether there is an attachment or a causal relationship between each variable which is the focus of this research. By using the causality method, the authors want to research and find out to what extent "The Influence of Competence and Intrinsic Motivation on Innovative Behavior and Work Meaningfulness as a mediating variable for the Education Unit Employees of the Ministry of Industry in West Sumatera" and also find whether there is a relationship or influence between independent variables and variables bound.

3. RESULTS AND DISCUSSION

Outer model analysis describes how each indicator block relates to its latent variable. This external model will later be used to assess validity and reliability.

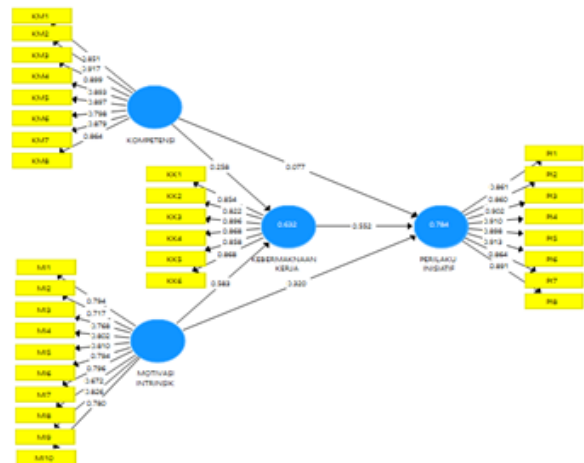


Figure 2 Results of the complying with SMARTPLS

Figure 1 shows the initial form of the measurement model for the validity of the indicators on the parent variable. In the validity measurement model, it can be seen that the indicators are not yet valid because there are still indicators that have a loading factor value below 0.7 or do not have good convergent validity. Therefore, it is necessary to re-estimate the model of the relationship between variables by removing the indicators that fall into the low loading factor category, which is below 0.7 in order to have good convergent validity. Based on the PLS test results, only the intrinsic

motivation variable has ten question items and one is invalid because it does not meet the criteria for loading factor ≥ 0.7 so it must be discarded.

Table 1. Results of the complying with SMARTPLS

Variable	Item Code	Loading Value
Intrinsic Motivation	MI8	0,672

After the invalid item is discarded, a re-estimation of the variable model is carried out, so the final form of the validity measurement model is obtained which can be seen in Figure 4.2 as follows:

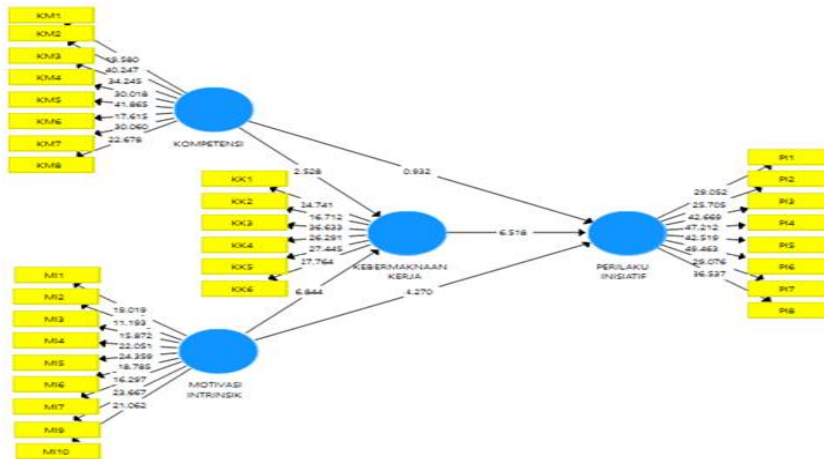


Figure 3 Results of the processing with SMARTPLS

Hypothesis testing

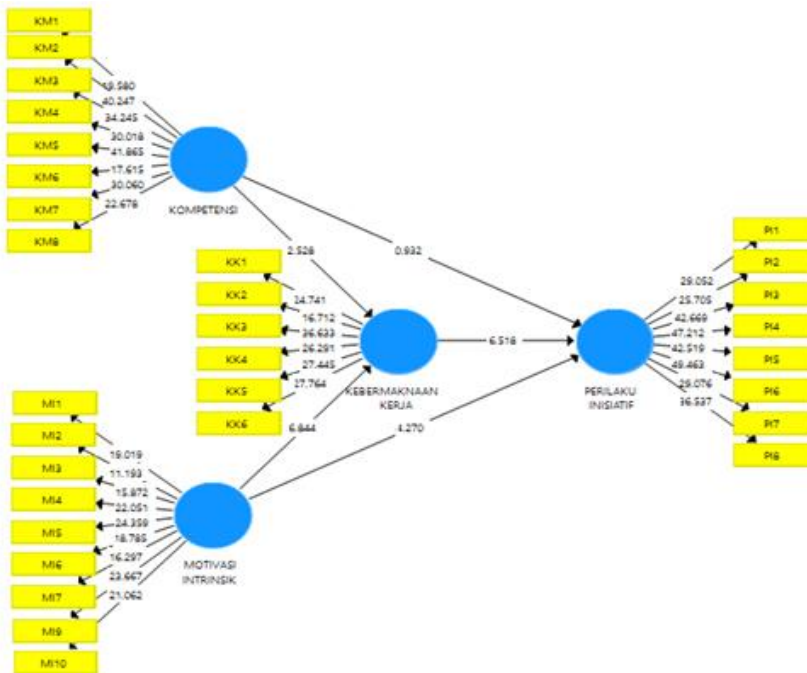


Figure 4 Results of the complying with SMARTPLS

Based on the picture above, it can be seen the results of hypothesis testing in the table below:

Table 2. Mean, STDEV, T-Values, P-Values

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
Work Meaningfulness -> Innovative Behavior	0.552	0.555	0.085	6.518	0.000
Competence -> Meaningfulness	0.260	0.259	0.103	2.528	0.012
Competence -> Innovative Behavior	0.073	0.065	0.078	0.932	0.352

Hypothesis 1: Effect of Competence on innovative behavior.

The first hypothesis states that competence (X1) has a direct effect on innovative behavior (Y). Based on the results of the calculation, it shows that the P value of competence on innovative behavior is $0.352 > 0.05$, so the hypothesis is rejected. The fourth hypothesis is test work motivation effect in mediating the influence of non-physical work toward innovative behaviour in the work environments.

Hypothesis 2: The effect of intrinsic motivation on innovative behavior.

The second hypothesis states that intrinsic motivation (X2) has a direct effect on innovative behavior (Y). Based on the results of the calculation, it shows that the P value of intrinsic motivation for innovative behavior is $0.000 < 0.05$, the hypothesis is accepted

Hypothesis 3: The Effect of Competence on the meaning of work

The third hypothesis states that competence (X1) has a direct effect on work meaningfulness (M). Based on the results of the calculation, it shows that the P value of competence for work meaningfulness is $0.012 < 0.05$, so the hypothesis is accepted.

Hypothesis 4: Effect of intrinsic motivation on meaningful work.

The fourth hypothesis states that intrinsic motivation (X2) has a direct effect on work meaningfulness (M). Based on the results of the

calculation, it shows that the P value of intrinsic motivation to work meaningfulness is $0.000 < 0.05$, so the hypothesis is accepted

Hypothesis 5: The effect of meaningful work on innovative behavior

The fifth hypothesis states that work meaningfulness (M) has a direct effect on innovative behavior (Y). Based on the results of the calculation, it shows that the work meaningfulness for innovative behavior is $0.000 < 0.05$, so the hypothesis is accepted. This means that work meaningfulness has a significant effect on innovative behavior among employees of the education unit of the Ministry of Industry in West Sumatera. This means that the fifth hypothesis meets the requirements and can be accepted.

Table 3. The result of hypothesis of indirect effect

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Competence -> Work Meaningfulness -> Inovative Behavior	0.144	0.147	0.067	2.161	0.031
Intrinsic Motivation -> Work Meaningfulness -> Inovative Behavior	0.319	0.318	0.061	5.237	0.000

Hypothesis 6: Meaningfulness of Work mediates the influence of Competence on Innovative Behavior

The sixth hypothesis states that work meaningfulness (M) is a mediator on the influence of competence on innovative behavior. The P value of competence for innovative behavior through work meaningfulness is $0.031 < 0.05$, so the hypothesis is accepted.

Hypothesis 7: Work meaningfulness mediates the influence of intrinsic motivation on innovative behavior

The seventh hypothesis states that work meaningfulness (M) becomes a mediator on the influence of intrinsic motivation on innovative behavior. The P value of intrinsic motivation on innovative behavior through work meaningfulness is $0.000 < 0.05$, so the hypothesis is accepted.

Based on the comes about of the examination, it appears that competence incorporates a positive and inconsequential impact on imaginative behavior among workers of the instruction unit of the Service of Industry in West Sumatera, this may be seen from the P esteem of competence for innovative behavior of $0.352 > 0.05$, so the primary speculation is rejected since competence isn't give coordinate impact o n imaginative behavior.

This finding is not in line with [9] theory which states that the effectiveness of innovative behavior will be achieved if the basic motives of workers, such as competence-autonomy and the desire to build social synergy, are able to provide encouragement for workers to be able to explore new ideas.

Intrinsic motivation affects innovative behavior. Employees who have high motivation will be able to increase innovative behavior because motivation is a determinant in directing the power and potential in

themselves. This means that high motivation will lead to innovative behavior. The results showed that intrinsic motivation had a positive and significant effect on innovative behavior. It can be seen from the P value

of intrinsic motivation for innovative behavior of $0.000 < 0.05$, so the hypothesis is accepted. This means that intrinsic motivation has a direct influence on the innovative behavior of employees of the education unit of the Ministry of Industry in West Sumatera. This means that the hypothesis meets the requirements and can be accepted.

Based on the results of the analysis, it shows that competence has a positive and significant effect on the work meaningfulness for employees of the education unit of the Ministry of Industry in West Sumatera, this can be seen from the P value of competence on work meaningfulness of $0.012 < 0.05$, the hypothesis is accepted. This means that competence directly affects the meaning of work for employees of the education unit of the Ministry of Industry in West Sumatera. This means that the hypothesis meets the requirements and can be accepted.

Based on the comes about of the analysis, it shows that work meaningfulness features a positive and noteworthy effect on imaginative behavior among employees of the education unit of the Ministry of Industry in West Sumatera, this can be seen from the P value of work meaningfulness for innovative behavior of $0.000 < 0.05$, the hypothesis is accepted. This means that when the work unit can appreciate the work of employees and assume that all employees are colleagues, the innovative behavior of employees can grow by itself.

Based on the comes about of the ponder, it appears that work importance gets to be a arbiter on the impact of competence on imaginative, this could be seen from the P esteem of competence on imaginative behavior through work importance of $0.031 < 0.05$, so the speculation is acknowledged factually. Seeing the results of the direct effect of competence on innovative behavior which is not significant, and there is a significant (indirect) effect of mediation, it can be interpreted that the mediation that occurs is full mediation, so it can be said that this hypothesis is also unacceptable due to inconsistencies in the test results.

Referring to the theory of [20], it is determined that X must play a significant role in Y in the absence of M (total effect), because there will be an effect to mediate.

Based on the comes about of the ponder, it appears that work significance gets to be a go between on the impact of natural inspiration on inventive behavior, this could be seen from the P esteem of inherent inspiration on inventive through work significance of $0.000 < 0.05$, the theory is acknowledged. This means that there is a positive and significant effect of intrinsic motivation on innovative behavior mediated by meaning in work.

4. CONCLUSION

This study aims to see the effect of competence and intrinsic motivation on innovative behavior with work meaningfulness as a mediator for employees of the education unit of the Ministry of Industry in West Sumatera. To analyze the relationship between these variables, this study uses Partial Least Square (PLS). Based on the analysis and discussion, several things can be concluded as follows:

1. Competence with indicators of work experience, education, knowledge and skills shows that competence has a positive and insignificant effect on the innovative behavior of employees of the education unit of the Ministry of Industry in West Sumatera. This means that competence does not have a direct influence on employee innovative behavior.
2. Intrinsic motivation with indicators of achievement, recognition, work itself, responsibility and progress show that intrinsic motivation has a positive and significant effect on the innovative behavior of employees of the education unit of the Ministry of Industry in West Sumatera. This means that intrinsic motivation has a direct effect on innovative behavior, in other words, when employees have the motivation to carry out their duties and give high dedication, there will be new innovations.
3. Competence with indicators of work experience, education, knowledge and skills shows that competence has a positive and significant effect on work meaningfulness. This means that competence has a direct influence on work meaningfulness in other words when an employee has the potential to perform various tasks in a job then he will make a positive contribution to the unit where he works.
4. Intrinsic motivation with indicators of achievement, recognition, work itself, responsibility and progress show that intrinsic motivation has a positive and significant effect on work meaningfulness. This means that intrinsic motivation has a direct influence on meaning in working in other words, employees will be dedicated to the unit where they work solely because they feel they have had the opportunity to actualize and realize their maximum self-realization.
5. The meaning of work with indicators of work, career and vocation shows that the meaning of work has a positive and significant effect on innovative behavior. This means that when employees can be appreciated for their work by the unit where they work, it can foster innovative behavior in them so that creative ideas and new innovations will be created for the advancement of the institution.
6. Work meaningfulness with indicators of work, career and vocations shows that work meaningfulness mediates the influence of competence on innovative behavior. This means that there is a positive and significant influence of competence on innovative behavior mediated by work meaningfulness.
7. Work meaningfulness with indicators of work, career and vocation shows that work meaningfulness mediates the influence of intrinsic motivation on innovative behavior. This means that there is a positive and significant influence of intrinsic motivation on innovative behavior mediated by work meaningfulness.

Suggestions

It is expected that superiors/leaders in each education unit of the ministry of industry in west sumatera pay attention to the competence possessed by each employee in order to maximize their duties and responsibilities. Judging from the research results with a TCR value of 83.26 which is already in the good category but does not directly contribute to employees in increasing innovative behavior to create new ideas for the progress of the work unit. There is one statement item whose TCR value is 80.92 which states that the education they have is in accordance with the assigned task but the TCR value is still below the average value. Thus, the leaders / superiors in each education unit of the Ministry of Industry in West Sumatera must pay attention to this by providing the training needed by

employees to further improve the competence of employees.

When viewed from the meaningfulness of work for employees of the education unit of the Ministry of Industry in West Sumatera, they have been able to mediate competence and intrinsic motivation towards employee innovative behavior with a TCR value of 78.66 in the sufficient category. However, this can provide a positive contribution to the competence and intrinsic motivation of employees to have innovative behavior. There is one statement item whose TCR value is 76.71, namely employees feel that their work is liked by their peers, but the TCR value is still below the average TCR value as a whole. For this reason, superiors / leaders can better understand each individual so that employees feel they are in the work unit.

It is hoped that future studies discusses more deeply competence related, intrinsic motivation, innovative behavior and work meaningfulness so that there is deeper study related to each of these variables.

REFERENCES

- [1] De Jong, J.P.J., Kemp, R. 2003. "Determinants of co-worker's innovative behaviour: An investigation into knowledge intensive services". *International Journal of Innovation Management*. Vol. 7, No.2, 189-212
- [2] Robbins, Stephen, P. 2006. *Perilaku organisasi*. Jakarta: Indeks
- [3] Sudarmanto. 2014. *Kinerja dan Pengembangan Kompetensi SDM*. Yogyakarta: Pustaka Pelajar
- [4] Purwaningdyah, G.P., Tri, D.W., dan Novita W. (2015). Efektivitas Ekstrak Biji Pepaya (Carica Papaya L.) Sebagai Antidiare Pada Mencit yang Diinduksi Salmonella Typhimurium. *Jurnal Pangan dan Agroindustri*. (03)04: 1283-1293.
- [5] Vandebos.2008.study of self determination in general.American.publich onways
- [6] Kleysen, R.F., & Street, C.T. 2001.Toward a multi-dimensional measure of individual innovative behavior. *Journal of Intellectual Capital*. Vol. 2, No. 3, 1469-1930.
- [7] De Jong, J., & Den Hartog, D. 2007."How leaders influence employee's innovative behavior". *European Journal of Innovation Management*. Vol. 10, No. 1, 41-64.
- [8] Carmeli, A., Meitar, R., Weisberg J. 2006. "Self-leadership skills and innovative behavior at work". *International Journal of Manpower*, 27 (1), 75-90.
- [9] Franken, R.E. 2002. *Human Motivation: Growth Motivation & Self Regulation*. USA: Wadsworth Tomson Learning
- [10] Gaynor, L.M. 2002. *The Role of Experience in Professional Skepticism, Knowledge Acquisition, and Fraud Detection*. Working paper. 1-28.
- [11] Siagian, sondang. 2004. *Manajemen Strategik*, Bumi Aksara, Jakarta.
- [12] Luthans, Fred. 2006. *Perilaku Organisasi*. Edisi Sepuluh, PT. Andi: Yogyakarta.
- [13] Winardi. J. 2004. *Manajemen Perilaku Organisasi*. Bandung: Prenada Media
- [14] Sedarmayanti. 2011. *Manajemen Sumber Daya Manusia, Reformasi Birokrasi dan Manajemen Pegawai Negeri Sipil*. Bandung: PT. Refika Aditama
- [15] Sutrisno, Edy. 2013. *Manajemen Sumber Daya Manusia*. Jakarta: Kencana
- [16] Wibowo. 2009. *Manajemen Kinerja*. Jakarta: Penerbit PT. Raja Grafindo
- [17] Dik, B. J., Duffy, R. D., & Eldridge, B. M. (2009). Calling and vocation in career counseling: Recommendations for promoting meaningful work. *Professional Psychology: Research and Practice*, 40(6), 625–632. [https:// doi.org/h t tps://doi.org/10.1037/a0015547](https://doi.org/10.1037/a0015547)
- [18] Wrzesniewski, A., McCauley, C., Rozin, P., & Schwartz, B. (1997). Jobs, career, and calling: People's relations to their work. *Journal of Research in Personality*, 31, 21–23.<https://doi.org/10.1006/jrpe.1997.2>
- [19] Steger, M. F., Dik, B. J., & Duffy, R. D. (2012). Measuring meaningful work: The work and meaning inventory. *Journal of Career Assessment*, 20(3), 322- 337.
- [20] Baron, R.M. and Kenny, D.A. (1986). The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations. *Journal of Personality and Social Psychology*. 51(6): 1173-1182