

# The Effect of Procedural Justice, Work Engagement, on Innovative Work Behavior

Gustiarti Leila, Hamidah and Dede Rahmat Hidayat  
*Management Science, Universitas Negeri Jakarta, Indonesia*

**Keywords:** Procedural Justice, Work Engagement, Innovative Work Behavior.

**Abstract:** Government regulation forces companies to focus on innovation as one of the methods to increase work performance so that they can compete with other companies. At the same time, with the still distant social hierarchy between the organization and the employees motivates the writers to examine whether procedural justice affects the innovative work behavior of the employees through the research on the relationship between procedural justice, work engagement, and innovative work behavior. Research was done on 173 supervisor-level employees of a nation-owned plantation company located in North Sumatera, Indonesia. Sample was chosen through simple random sampling method. Structural equation modeling was used to test the hypothesis. Results showed that procedural justice has a significant positive effect on innovative work behavior ( $\beta=0.242$ ;  $p=0.000$ ). Procedural justice also indirectly affects innovative work behavior through work engagement ( $\beta = 0.173$ ;  $p=0.000$ ). Thus, it can be concluded that procedural justice can increase innovative work behavior both directly and indirectly through the mediation of work engagement. This study also found that the contribution of procedural justice and work engagement to innovative work behavior is  $R^2$  adjust = 0.28, while the contribution of procedural justice on work engagement is  $R^2$  adjust = 0.20. Suggestions for further research include strengthening other variables that can also cause increase in innovative work behavior in this particular company.

## 1 INTRODUCTION

According to Kanter (1988) and Scott & Bruce (1994), innovative work behavior can be understood as a multi-dimensional concept. Employees produce innovative ideas, look for supports to these ideas from their colleagues and supervisors, and apply these ideas in their workplace (De Spiegelaere, Van Gyes & Van Hootegem, 2014). West & Farr (1990) defined innovative work behavior as “Every employee’s behavior that is aimed to the creation, promotion and application of an idea (in their role, group, or organization). Based on the works of Kleysen & Street (2001) and Yuan & Woodman (2010), IWB is every individual action that is aimed the generation, processing, and application/implementation of new ideas regarding methods that include ideas for products, technology, procedures, or work process with the aim to increase the effectivity and success of an organization.

According to De Jong & Den Hartog (2010), innovative behavior relates to the production of new ideas and innovative results. Furthermore, innovative

work behavior also refers to the ability to think differently, reorganize information and knowledge with other methods, both in order to develop new products and processes and to realize and spread them. This concept differs from creativity in that to show the novelty and radicality of an idea, innovative behavior encompasses the socio-psychological process between individuals that concerns more on the implementation and realization of an idea.

There are many variables that can affect innovative work behavior of employees. Procedural justice is one of those variables. Procedural justice refers to the perception of employees on how open their organization (leaders) to hear the opinions of its members on the decision-making process (Zeb, Abdullah, Othayman & Ali, 2019). Other than that, procedural justice shows the official standard and quality of exchanges in the decision-making process. Decision making process shows the interaction between decision makers and receivers (Yu, Lee, Han & Kim, 2019). When an employee feels that they are involved in a decision-making process, then according to the social exchange theory, employees

will reciprocate with positive behavior in the form of innovative work behavior.

## 2 LITERATURE REVIEW AND HYPOTHESES

### 2.1 Procedural Justice and Innovative Work Behavior

Organizational justice, especially procedural justice, has become an important situational variable in an organization and employee. Procedural justice focuses on the decision-making process by giving employees an opportunity to voice their opinions (Blader & Tyler, 2003). Procedural justice is a measure of the extent of uniformity exists in the decision-making process of an organization and the opinions of the organization members are mirrored in the decision-making process. Zeb et al. (2019) defined procedural justice as the openness of a method or procedure in the making of a decision or goals. Tyler (1988) defined that procedural justice refers to the justice that is felt from the procedure that is used to make a decision.

The existence of procedural justice increases a form of cooperative behavior, which is very important for every technical, economical, and social progress, including the ability for innovative behavior. The concept of procedural justice (Masterson, Lewis, Goldman & Taylor, 2000) relates to the social exchange pathway. This concept affects the perception of employees on a strong connection between them and their work environment. Procedural justice also refers to the exchange between an organization and its employees. Prior researches show that formal procedure is usually applied by top management and written on behalf of an organization that acts as a legal entity (Cropanzano, Prehar & Chen, 2002). When employees think that the applied procedure is just, they will reciprocate by forming a more positive attitude to the organization (Cropanzano et al., 1997; Masterson et al., 2000).

From empirical studies that were conducted by Akram (2016) and Kim & Park (2017), procedural justice shows a significant positive influence both directly and indirectly on the innovative work behavior of the employees. When an individual believes that their organization cares and treat them justly, their motivation to perform their best on their work increases, which in turn causes them to be involved in the creation, development, and application of ideas related to work.

H1: Procedural justice has a significant positive influence on the innovative work behavior of the employees

### 2.2 Procedural Justice and Innovative Work Behavior That Is Mediated by Work Engagement

Many existing literatures emphasize the mediation role of work engagement in the relation between the antecedent and consequence in an organization (Kim et al., 2012). The mediation effects from work engagement on the relation between procedural justice and innovative work behavior were examined by A. Agarwal (2014). The study showed that if an organization seriously cares about the justice in the decision-making process, their effort will facilitate and support the work involvement of employees. Procedural justice has a definition as the openness of a method or procedure in the making of a decision or desirable outcomes (Cropanzano & Ambrose, 2001). One of the important variables in the procedural justice theory is process control or voice effect, that is the act of giving subordinates a chance to express their wishes, opinions, views, and preferences before a decision is made. Psychologically speaking, voice effect gives subordinates the feeling that they are involved in the making of a decision (Folger, 1987).

The mediation effect of work engagement on the relation between procedural justice and innovative work behavior shows that if an organization cares and is open to their employees' input, this will make employees feel involved in the decision-making process, which ultimately will increase the work engagement of their employees (A. Agarwal, 2014). The strengthening of employees' work engagement, in turn will increase their willingness to come up with new ideas for their organization and apply those ideas to their workplace with the support of their colleagues or the management. Theoretical framework that refers to the social exchange theory also supports this proposition. In the view of the social exchange theory on meta-analysis (Colquitt et al., 2013), the reciprocal relationship and the exchange relationship between employees and their organization (Agarwal, Datta, Blake-Beard & Bhagarva, 2012) positively influence employees' work engagement and in the end increase the positive behavior of employees (innovative work behavior).

H2: There exists a significant and positive influence of procedural justice on innovative attitude through work engagement.

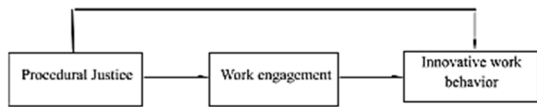


Figure 1: Hypothesis model that will be empirically tested in this study.

### 3 METHODS

#### 3.1 Research Design and Respondent

This study tests the theoretical model using an individual data source that is obtained from supervisor level employees of a nation-owned plantation company. This study is conducted using quantitative approach and survey method with questionnaire that is designed with rating scale. On the scale of innovative work behavior, all positive items scores range from 1 (never) to 5 (very often). On the scale of procedural justice and work engagement variables, positive items are given scores ranging from 1 (disagree very strongly) to 5 (agree very strongly), while negative items are given score 1 (agree very strongly) to 5 (disagree very strongly).

The data gathering technique used is simple random sampling that is gathered from a population of 900 supervisor level employees using questionnaires that are distributed through Google Form. The results of sample size calculation with the Slovin formula gives a minimum sample size of 276 respondents. However, the employees that filled the questionnaires amount to 264 individuals. After conducting a selection of gathered data, the amount of data that can be processed statistically is 173, which consist of 91% males and 9% females, with work experience ranging from 1 year to more than 30 years.

#### 3.2 Measures

The measure of innovative work behavior is an adaptation from the scale of innovative work behavior that is developed by Janssen (2000), which measures indicators of 1) idea generation, 2) idea promotion, and 3) idea realization. The number of items before and after the test are 9 items with Cronbach’s alpha 0.918. The measure of procedural justice that is used is an adaptation of the scale of procedural justice that is developed by Reizig, Bratton & Gertz (2007) which measures indicators of 1) superiors’ respectful attitude, 2) superiors’ openness, 3) objectivity in decision making, and 4) fact-based decision making. The mount of items before testing are 17 and 16 after

testing with Cronbach’s alpha 0.841. The measure of work engagement that is used is an adaptation of the work engagement scale that is developed by Shuck et al. (2016) which measures indicators of: 1) cognitive engagement, 2) emotional engagement, and 3) behavioral engagement. The number of items before testing are 20 and 15 after testing with Cronbach’s alpha 0.786. The instruments used measure latent construct with 5 Likert scale answer choices. For procedural justice and work engagement beginning from 1 = disagree very strongly to 5 = agree very strongly. While for innovative work behavior beginning from 1 = never to 5 = very often.

#### 3.3 Hypothesis Statistic

1. The influence of procedural justice on the innovative work behavior.  $H_0 : \beta_{x1y} \leq 0$   $H_1 : \beta_{x1y} > 0$
2. The influence of procedural justice on the innovative work behavior through work engagement.  $H_0 : \beta_{x1zy} \leq 0$   $H_1 : \beta_{x1zy} > 0$

### 4 RESULT

Table 1 is the sample descriptive statistic from the variables used in this study with 173 respondents. The table shows the mean value, standard deviation, and variance of the variables Procedural Justice (PJ), Work Engagement (ENG), and Innovative Work Behavior (IWB).

Table 1: Descriptive Statistics of Sample.

	N	Range	Mean	Std. Dev.	Variance
IWB1 (Y.1)	173	3.00	3.8092	0.68338	0.467
IWB2 (Y.2)	173	3.00	3.7624	0.62248	0.387
IWB3 (Y.3)	173	3.30	3.6081	0.66046	0.436
PJ1 (X1.1)	173	1.70	3.9723	0.44018	0.194
PJ2 (X1.2)	173	2.20	3.8913	0.49484	0.245
PJ3 (X1.3)	173	2.40	3.7855	0.50964	0.260
PJ4 (X1.4)	173	2.00	3.8422	0.46781	0.219
ENG1 (Z2.1)	173	2.00	4.3434	0.44477	0.198
ENG2 (Z2.2)	173	1.70	4.3699	0.46471	0.216
ENG3 (Z2.3)	173	2.00	4.2439	0.43178	0.186
Valid N (listwise)	173				
	N	Range	Mean	Std. Dev.	Variance

Table 2: Construct Reliability and Validity.

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
PJ (X1)	0.841	0.857	0.893	0.677
ENG (Z)	0.786	0.788	0.575	0.700
IWB (Y)	0.859	0.861	0.914	0.779

Table 2 shows that all variables have the Cronbach's alpha and composite reliability values above 0.7. This shows that the instrument used can be deemed reliable. The average variance extracted values of each variable are above 0,5 showing that those indicators represent their latent variables. Thus, the instrument can be deemed valid.

Table 3: Significant value of direct and indirect influence.

Variable	Path coefficient	P Values	Conclusion
PJ->IWB	0.242	0.008	H1: Ho rejected
PJ->ENG -> Y	0.041	0.089	H2: Ho rejected

Table 4: Determinant coefficient values.

Endogen variable	R <sup>2</sup> adjusted
Work Engagement (Z)	0,20
Innovative Work Behavior (Y)	0,28

#### 4.1 Hypothesis Testing

The results of hypothesis testing with PLS-SEM shows that H0 is rejected on the direct influence of procedural justice on innovative work behavior ( $\beta=0.242$ ,  $p = 0.008$ ). This means that there exists a significant positive influence of procedural justice on innovative work behavior. This agrees with the proposed research hypothesis. Results also shows that H0 is rejected on the indirect influence of procedural justice on innovative work behavior through work engagement ( $\beta=0.173$ ,  $p= 0,000$ ). This means that there is a significant influence of procedural justice on innovative work behavior which is mediated through work engagement. This also agrees with the proposed hypothesis.

The determinant coefficient values on work engagement variable R<sup>2</sup> adjusted = 0.20 which means that the procedural justice variable contributes 20% to the engagement variable. While the

determinant coefficient on the innovative work behavior variable R<sup>2</sup> adjusted = 0.28 which means that the contribution of procedural justice and work engagement variable on the innovative work behavior is 28%.

## 5 DISCUSSION

The results of statistic testing on the direct influence of procedural justice on the innovative work behavior gives the path coefficient value  $\beta = 0.242$  ( $p=0.008$ ), which indicates a significant result. This indicates that the procedural justice which is precepted by employees of the company affects innovative work behavior.

Procedural justice is the openness in decision making of the company management to its members. To be more exact, procedural justice is employees' perception on how open an organization is and to what extent it applies reasonable procedures and shows willingness in listening to the opinions of its members in the decision-making process.

Prior studies have found that there is a significant and insignificant influence between procedural justice with innovative work behavior. Research (Akram, Taher & Feng, 2016) shows that a form of organizational justice has a strong positive influence on the innovative work behavior of employees in China, especially procedural justice on innovative work behavior has a correlation of ( $r= 0.627$ ,  $n= 235$ ,  $p< 0.00$ ), which indicates that procedural justice has a significant correlation to the innovative work behavior. In line with this, Kim & Park (2017) discovers that procedural justice directly influences engagement positively. The same result is also shown by studies done by Nazir et al. (2019) that shows that procedural justice especially can motivate the innovative behavior of employees. Study by Ismail (2020) also indicates that there is a significant relationship between procedural justice on innovative work behavior. Research on the effect of organizational justice on engagement (Ohiorenoya & Eguavoen, 2019) shows that three dimensions of distributive, interactional, and procedural have influences on employees' engagement.

Statistic testing results of indirect influence of procedural justice on innovative work behavior through engagement gives path coefficient value  $\beta = 0.173$  ( $p=0.000$ ). This shows a significant result, which means there is an influence between procedural justice on innovative work behavior through work engagement.

The goal of this study is to show the mediation ability of engagement in the relationship between procedural justice with innovative work behavior. Previous studies have examined the direct effect of procedural justice on engagement (Akram, Taher & Geng, 2016; S. Nazir, Shafi, Atif, Qun & Abdullah, 2019; A. Agarwal, 2014; Streicher et al., 2012; Ismail, 2020) which show that procedural justice positively influences innovative work behavior. The results of the indirect effect of procedural justice on innovative work behavior by W. Kim & Park (2017) show that there exists a significant relationship between procedural justice and innovative work behavior that is mediated by engagement.

The determinant coefficient values of procedural justice to innovative work behavior and the relationship between procedural justice and work engagement to innovative work behavior are 20% and 28% respectively. These values are relatively weak. This indicates that there needs to be strengthening of other variables in addition to the aforementioned variables in order to increase work engagement and innovative behavior in this company.

## 6 IMPLICATION

The determinant coefficient values of procedural justice to innovative work behavior and the relationship between procedural justice and work engagement to innovative work behavior are 20% and 28% respectively. These values are relatively weak. This indicates that there needs to be strengthening of other variables in addition to the aforementioned variables in order to increase work engagement and innovative behavior in this company.

## 7 CONCLUSION

This study applies social exchange theory that states that when employees feel that they are treated well by the management through effort such as involving them in decision making process, then they will reciprocate by showing innovative work behavior. Thus, companies are expected to maintain positive attitude (such as procedural justice) so that innovative work behavior can be maintained. Determination testing results show that the contribution of procedural justice to engagement is 20%, while the contribution of procedural justice and work engagement to the innovative work behavior is 28%. These are relatively weak and show that there needs

to be additional measures taken by strengthening other variables that can increase innovative work behavior in this company.

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