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Transformational Leadership, Psychological Empowerment, and Innovative Work Behavior of Frontline Employees in the Public Sectors: Empirical Evidence from North Sumatera, Indonesia

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ABSTRACT

The purpose of this paper is to investigate the impact of transformational leadership (TL) and psychological empowerment (PE) on innovative work behavior (IWB) of frontline employees at public sector in North Sumatera. This study examines the effects of PE as a moderator on the relationship between transformational leadership and innovative work behavior (IWB). The data were collected from 786 frontline employees through an online survey. Partial least square structural equation modeling analysis by the bootstrap method were used for the data analysis. Results indicated that TL and PE have positive influence on innovative work behavior, however specifically, the result showed that PE does not moderates on the relationship between TL and IWB of frontline employees in North Sumatera.

Keywords: Frontline Employee, Innovative Work Behavior, Psychological Empowerment, Public Sector, Transformational Leadership

INTRODUCTION

An important factor in determining organizational competitive advantage is employees' innovative work behavior (Jiang & Gu, 2016; Shin, Yuan, & Zhou, 2017; Wang, Rode, Shi, Luo, & Chen, 2015). Innovative work behavior refers to activities pertaining to the employee's development, promotion, and implementation of a useful innovation at any organizational level (Rank, Pace, & Frese, 2004). We identified transformational leadership as one of the most important factors affecting creativity and innovativeness, so overall, the purpose of this study is to examine how the complex interplay between transformational leadership and psychological empowerment explain employees' innovative work behavior.

The prior studies have yielded inconsistent results and meta-analytic findings showed a high variation in the relationship between transformational leadership and innovative work behavior (Afsar, Badir, & Bin Saeed, 2014; Basu & Green, 1997; Uhl-Bien & Arena, 2018; Vessey, Barret, Mumford, Johnson, & Litwiller, 2014). Some studies found positive effects while others found negative effects. Due to the complexity of the challenges, employees need to work and learn together to develop novel and innovative solutions

(Truijen, Sleegers, Meelissen, & Nieuwehuis, 2013). Thus, although transformational leadership is supposed to be positively related to follower innovative work behavior, with these inconclusive findings, researchers question the simplistic transformational leadership–innovative work behavior relationship in order to consider through what explanatory mechanisms and what boundary conditions (in the presence of what moderators) transformational leaders might promote innovative work behaviors (Rosing, Frese, & Bausch, 2011; Tse, To, & Ciu, 2018).

Existing work of researchers, thus, helps us in starting to understand what influence employee innovative work behavior. Many studies on leadership, as well as on innovativeness, have been conducted (e.g., Basu & Green, 1997; Oke, Munshi, & Walumba, 2009). However, little has been done so far in studying the boundary conditions on the relationships between transformational leadership in stimulating innovative work behavior through the moderating role of psychological empowerment. Despite the research findings speaking in favor of the positive role leaders have in encouraging innovative work behavior, we are witnessing the inconsistency of the empirical results on the relationship between leadership and innovativeness (Crossan & Apaydin, 2010).

We know little about the contextual boundary factors that influence leaders' abilities to promote innovation in organizations (Denti & Hemlin, 2012; Rosing et al., 2011), or about the psychological mechanisms that moderate the relationship between leadership and individual innovation (Byrne, Mumford, Barret, & Vessey, 2009). Thus, this is an opportune time to examine the boundary conditions of transformational leadership in innovative work settings. The moderating role of psychological empowerment offers practical solutions on how to improve the innovative work behavior of employees at an individual level. With our research, we respond to the call of researchers on the investigation into the factors that moderate the relationship between leadership and innovation. We focus our attention on the under-researched boundary conditions about mechanisms that moderate leadership to individual innovation (Byrne et al., 2009).

Even when the individual level has been addressed in innovation research, frontline employees have often been overlooked, though they are in a prime position to recognize opportunities for innovation. According to this fact, the objective of this paper is to contribute to the existing scientific discussion on transformational leadership, psychological empowerment, and their interactive roles in stimulating innovative work behavior of frontline employees in the public sector, specifically, by understanding the quasi moderation of psychological empowerment.

Even when the individual level has been addressed in innovation research, frontline employees have often been overlooked, though they are in a prime position to recognize opportunities for innovation. Thus, this research focuses on frontline employees' role in public sector. Furthermore, as novelty of this research is the role of psychological empowerment as quasi moderation variable (psychological empowerment act as independent variable and as moderating variable).

It is assumed that transformational leaders will inspire individual employees by relating their future to the organization's future and to encourage them to engage in the innovative work behaviors by developing a strong sense of shared vision and belongingness with the organizations. Transformational leaders' personalized attention and support to followers' needs and requirements could increase their influence on

followers' engagement in creative activities. By constantly questioning and challenging followers' assumptions and thinking, these leaders stimulate followers' intellectual thinking, which ultimately encourages followers to become involved in generation and implementation of ideas. Such leaders have the ability to articulate the organizational vision with individual goals, increase inspirational motivation among followers (Bednall, Rafferty, Shipton, Sanders, & Jackson, 2018). Ma and Jiang (2018) suggested that transformational leaders encourage employees' openness, experimentation, and risk-taking behavior, which consequently promote innovative work behaviors in organizational contexts. Based on above arguments, it is hypothesized:
H1: Transformational leadership is positively associated with innovative work behavior.

Transformational leadership can make them willing to be innovative, however they need to feel able to be innovative (via psychological empowerment) to move into action and behave innovatively. In contrast, inspiring followers with low psychological empowerment is less effective, because these followers do not believe they have the possibility to take initiative. This might cause followers to become demotivated, which in turn could even hinder innovative behavior. Employees who feel high level of psychological empowerment engage in proactive behavior more often due to independence in decision making. Thomas and Velthouse (1990) suggested that employees become less productive and are unable to utilize full creative potential due to existing traditional organizational practices which render feelings of powerlessness. Thus, feelings of powerlessness lead to operational ineffectiveness and inhibit employee creativity. Based on above arguments, it is hypothesized:
H2: Transformational leadership is positively associated with innovative work behavior.

This study also proposed that transformational leadership would have the strongest positive relationship with employees' innovative work behavior when they are psychologically empowered. The moderating role of psychological empowerment offers practical solutions on how to improve the innovative work behavior of employees at an individual level. The results on the role of psychological empowerment comply with past studies that show the importance of psychological empowerment for innovative work behavior (e.g., Jung, Chow, & Wu, 2003; Spreitzer, de Janasz, & Quinn, 1995; Thomas & Velthouse, 1990). Considering the importance of psychological empowerment in the relationship between transformational leadership with innovative work behavior, Pieterse, van Knippenberg, Schippers, and Stam (2010) put forward the effects of psychological empowerment on work, which requires high knowledge intensity. The results of the trust, however, offer the opportunity for exploring the conditions under which low confidence is connected with positive outcomes. Based on above arguments, it is hypothesized:
H3: The relationship between transformational leadership and innovative work behavior is moderated by psychological empowerment.

When the psychological empowerment is high, the relationship between transformational leadership and innovative work behavior is more positive than when the psychological empowerment is low.

RESEARCH METHOD

Research Setting and Participants

In this study we employed survey methodology to collect data. Employees from 17 regional government in North Sumatera participated in this study. The study utilized the

purposive sampling technique, which is based on the researchers' judgment of the prospective respondents (Kumar, 2012). We acquired the services of 17 research assistants from 17 regional government in North Sumatera. They have responsibilities to share each questionnaire through a Google form, which was distributed via hyperlinks in various online forums (e.g., WhatsApp and LINE) utilized by those who worked at various public sector in North Sumatera.

During the two-month process of data collection started from July to August 2020, we successfully collected data from 786 respondents.

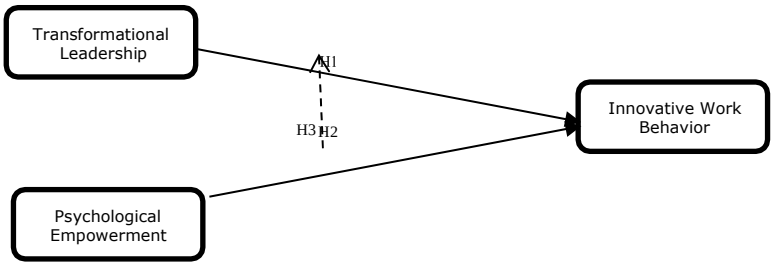

Figure 1. Research Model

Measurement

All items were measured by a five-point Likert scales ranging from 1 ''strongly disagree'' to 5 ''strongly agree". A 20 items scale was taken from Multifactor Leadership Questionnaire (MLQ) Form 5X to measure transformational leadership, including idealized behaviors, idealized attributes, inspirational motivation, intellectual stimulation, and individualized consideration (Bass & Avolio, 1997). We converted these scales into one higher-order factor which is consistent with recent empirical studies (Afsar et al., 2014; Pieterse et al., 2009). The 12-item psychological empowerment at work scale, developed by Spreitzer (1995), using the four cognitive aspects of empowerment (meaning, competence, self-determination, and impact) was used in this study. Employees were asked to rate the extent to which they believe they are empowered in their jobs on a five-point scale (1 - strongly disagree to 5 - strongly agree). Innovative work behavior was measured with four dimensions adapted from De Jong and Den Hartog (2007), and Tierney Farmer and Graen (1999). The items were rated on a 5-point scale.

RESULTS AND DISCUSSION

Descriptive Analysis

Due to the difficulties in defining the sampling frame, we employed purposive sampling, in which 786 frontline employees from 17 regional government in North Sumatera were used as respondents. The respondents of this study were mostly female at 52,93% or somewhat more than half of it. The majority of the respondents were below 35 years old (48,22%), and generally have attained a Diploma and Bachelor's or degree (65,02%).

Our 786-sample demonstrated that in the level of age below 35 years old and education, "graduate" is quite large number. It indicates the respondents are in high energy and motivation. By this situation it is a good condition for government, since this is a possible situation to make their employees more innovative.

Hypothesis Analysis

The statistical method used in hypothesis analysis is path modeling (PLS-PM) using SmartPLS 3.0. This model was used, because the objective of this study was primarily to identify the predictive model relevance of our conceptual framework, namely transformational leadership, psychological empowerment on innovative work behavior.

There are two stages of testing in PLS-PM which are first, testing the outer model or measurement model, and second, testing the inner model or structural model. In testing the outer model, it examines the relationship between each latent variable to the indicators (Caraka & Sugiarto, 2017). While in the inner model testing, it proves the relationship between latent variables (Caraka et al, 2020). One of the outer model testing is testing loading values to measures validity, as we can see in Table 1 below.

Table 1. Validity Based Loading Factor

No	TL	IWB	PE
1	0.775	0.728	0.720
2	0.881	0.937	0.842
3	0.710	0.918	0.772
4	0.800	0.943	0.719
5	0.782	0.852	0.846
6	0.769	0.924	0.837
7	0.885		0.854
8	0.880		0.870
9	0.885	0.936	0.865
10	0.878	0.908	0.808
11	0.890	0.901	0.841
12	0.882	0.933	0.721

*TL = Transformational Leadership, PE = Psychological Empowerment, IWB =Innovative Work Behavior

Due to the test results of the outer model for the first order, the loading value states the correlation between latent variables and the indicators. The higher the loading value, the more closely the correlation between latent variables and the indicators. A loading value of > 0.7 is acceptable. From table 1, it is known that the loading value for all indicators is larger than 0.7 (> 0.7), which means that all the indicators are valid in terms of reflecting latent variables. After that, we also measured the reliability, the result of which are presented in Table 2.

Table 2. Reliability Based Cronbach's Alpha

	Composite Reliability
TL	0.960
PS	0.952
IWB	0.979

*TL = Transformational leadership, PE= Psychological Empowerment, IWB =Innovative Work Behavior

Due to the test results of the outer model for the first order, the loading SmartPLS output

from Table 2 shows of composite reliability value for all the construct > 0.7. All value of composite reliability > 0.7 is acceptable. From Table 2, it is known that value for all dimension > 0.7, which means that all the composite reliabilities are accepted.

After testing the outer model (measurement model), the inner model (structural model) is then tested. The inner model testing includes testing the significance of direct effects, and moderation effect. Table 3 is a model image that presents the path coefficient value.

Table 3. Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
KT -> IWB	0.211	0.211	0.048	4.392	0.000
PS -> IWB	0.303	0.211	0.048	4.392	0.000
Moderating PS -> PKI	0.047	0.048	0.028	1.657	0.058

*TL = Transformational Leadership, PE= Psychological Empowerment, IWB =Innovative Work Behavior

An effect is said to be significant if the t-statistic is >1.96 and p-value is <0,05. Based on the test results of the significant of the direct in Table 2, TL has a positive effect on IWB, with t statistic 4.392>1.96 and p-value 0.000< 0,05. After that, Table 2 also presents the test results of PS on IWB. Based on the path coefficient, the t statistic is 4.392>1.96, and p-value is 0.000<0,05. From this result PS has a positive effect on IWB. The table also showed the moderating role of PS with t-stat 1.657<1.96 and p-value 0.058>0.05. It means that PS has no a positive effect on the relationship between TL and IWB.

The main objective of this study is to examine the relationship between the transformational leadership, psychological empowerment of frontline employees in public sector. This study finds that transformational leadership has a significant effect on innovative work behavior. We also examine the quasi-moderation role of psychological empowerment. As an independent variable, psychological empowerment has a positive effect on IWB, however as a moderator it has no moderation effects on the relationship between transformational leadership and innovative work behavior. However, our finding is inconsistent with previous research. In contrast to studies in many private sectors, this study did not find the moderation effect of psychological empowerment between transformational leadership and innovative work behavior.

Pieterse et al., (2010) has suggested that psychological empowerment is a psychological state that may be relatively independent of transformational leadership and is as such an important moderator of the influence of transformational leadership. We also claim that transformational leadership is more effective in encouraging innovative work behavior with followers having a higher as opposed to those with lower levels of psychological empowerment (Pieterse et al., 2010). On the contrary, followers who are less psychologically empowered, do not have the confidence to take innovative initiatives, which might lead to followers to experience demotivational state, or it could even hinder their innovative behavior. Therefore, low psychological empowerment is

expected to be less effective (Pieterse et al., 2010). Employee in the public sector perceive their work environment as highly constrained and rule-bound. If so, they may feel overwhelmed by the bureaucracy system. It can make employees are in lower levels of psychological empowerment, so it cannot moderate the relationship between transformational leadership and innovative work behavior.

CONCLUSIONS

This study aids our understanding of the impact of transformational leadership and psychological empowerment on innovative work behavior in public sectors. The findings of this study are transformational leadership and psychological empowerment have a significant effect on innovative work behavior. Thus, it is very important for organization public in North Sumatera to increase the role of transformational leadership and make their employees feel empowered.

Transformational leaders empower learning dispersion, relegate challenging tasks, and excite intellectual incitement, which is all related to creativity and innovative work behavior. This leadership style prepares employees to take on more responsibility and increase convictions about their ability to perform activities and achieve tasks with novelty and creativity. Psychological empowerment makes employees to see themselves as competent, capable, and proficient to initiate changes, influence work roles, shape empowerment work contexts according to their own preferences, and extract meaning from their activities by acting independently.

In contrast to studies in the private sectors, this study results revealed that psychological empowerment has no a relevant moderating role in the relationship between leadership and innovative work behavior in North Sumatera. This finding may encourage future scholars to more fully consider dynamics within innovative work behavior at the team and organization levels.

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