

DOES JOB INVOLVEMENT INFLUENCE PSYCHOLOGICAL EMPOWERMENT AND INNOVATIVE BEHAVIOUR?

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Abstract. Innovative behaviour is essential to maintain and improve an organization's competitiveness. Earlier studies on innovative behaviour contend that psychological empowerment influences innovative behaviour. As psychological empowerment is a multi-dimensional construct, it is necessary to investigate the link between each of its dimensions with innovative behaviour. This research also includes the role of job involvement as a mediator. There is a notion that dimensions of psychological empowerment may differ across cultures, industries, and jobs. Hence, this paper enlarges previous research because it was conducted in Indonesia in the business setting. The respondents were 75 supervisors at a wheat flour company. Partial Least Square was used to examine the research model. Results of the study show partial mediation for the meaning and impact dimensions and complete mediation for self-determination. Competence has no direct effect on innovative behaviour.

Keywords: job involvement; psychological empowerment; innovative behaviour

INTRODUCTION

Based on the final report on the analysis of the dynamics of Indonesian food consumption, there is a change in the pattern of staple food from local food to national food such as rice and to international food such as wheat flour (Ministry of Trade, 2013). Indeed, the average per capita yearly consumption of wheat flour in 2018 increased by 19.92% since 2015 (Indonesia, Secretary General of Agriculture, 2018). Moreover, the growth of domestic flour consumption in 2019 is predicted to grow above 6% compared to 2018 (Andry, 2018). As one of the food commodities needed by the community on a large scale, wheat flour has an important role in the food industry because it has become one of the staple foods, which is increasingly popular especially in Asia (UNICEF, 2010). Data from Indonesian Flour Mills Association (APTINDO, 2016) demonstrates that the sale of national wheat flour has increased steadily. The growth in wheat flour sales that follows Indonesia's population growth proves that the flour industry needs to optimize the performance of its companies in order to meet the growing needs of the market.

The increase in market needs above is an opportunity for Indonesian flour industry. This opportunity needs to be balanced with productivity and the ability to compete with other companies. Organizations must encourage employee innovative behaviour as it acts as the tactical source for organizational development (Singh & Sarkar, 2012). Employee innovative behaviour can be defined as an employee's ability to seek and develop new ideas and try to form support in implementing these ideas (Singh & Sarkar, 2012). Companies can remain competitive in a globalized business environment because they rely on their employees'

innovative behaviour (Schermuly, Meyer, & Dämmer, 2013). Thus, it is important to understand the factors that drive innovative behaviour in the organization.

Research shows that psychological empowerment promotes employee innovative behaviour (Ghani, Hussing & Jusof, 2009; Abukhait, Bani-Melhem, & Zeffane, 2018; Javed, Abdullah, Zaffar, Haque, & Rubab, 2018; Singh & Sarkar, 2018). Psychological empowerment is an intrinsic motivation that is manifested in four cognitions, which reflect a person's orientation to his work role (Spreitzer, 1995). These four cognitions are: sense of meaning, competence, self-determination and impact. Together, these four variables reflect proactive behaviour that is oriented towards one's work role. In other words, empowered employees do not see their work situation as given but something that can be formed through their own activities (Spreitzer, Kizilos & Nason, 1997). As psychological empowerment is multidimensional, it is important to investigate the link between its individual dimensions with innovative behaviour. Such a study becomes more crucial since each dimension is context-specific, and can differ across cultures, industries, and occupations (Hancer, George, & Kim, 2005, Singh & Sarkar, 2012). Therefore, this present research aims to answer these particular questions within the context of wheat flour industry.

Another factor that promotes employee innovative behaviour is job involvement. Kanungo (1982) explains that job involvement refers to the preoccupation, participation, and cognitive care of employees for the work they are doing. Amabile (1988) conceptualizes job involvement as an important thing to enhance creativity and innovation in organizations. Singh and Sarkar (2012) also explained that employees tend to be more innovative when their involvement is higher with work that matters to them.

Given the rise of wheat flour consumption in Indonesia and the importance of employee innovative behaviour, it will be fascinating to study this concept in relation to psychological empowerment and job involvement. We propose that psychological empowerment and job involvement influence job innovation. Specifically our objectives are (1) to examine whether all dimensions of psychological empowerment link with innovative behaviour, (2) to analyze which dimensions have stronger effect on innovative behaviour, and (3) to investigate the effects of job involvement on innovative behaviour. To address these objectives, the following sections offer a brief literature review of the theoretical concepts, an explanation of the research methods to gather and evaluate the data, and a discussion of the study results.

To obtain the research goals, we utilize Partial Least Square. The findings of this study show that only two dimensions of psychological empowerment directly influence innovative behaviour, namely meaning and impact. Both dimensions also affect innovative behaviour indirectly through job involvement. Also, self-determination indirectly affects innovative behaviour through job involvement. Finally, self-determination and competence do not directly influence innovative behaviour.

LITERATURE REVIEW

Innovative Behaviour and Dimensions of Psychological Empowerment

According to West and Farr (1990), innovative behaviour is an employee's intended introduction or implementation of new ideas, products, processes or procedures to his/her job or organization. Some of the examples of innovative behaviour are suggesting a new approach to attain goals, using new work procedures, and analyzing available resources to apply new ideas. Scholars conclude that innovative behaviour is complex as it consists of activities to produce or initiate new ideas (either by oneself or adopted from others) and the awareness or application of new thoughts (Kanter, 1988; Janssen, 2003; Scott & Bruce, 1994). Innovative behaviour is related to creative behaviour in which creative behaviour is defined as behaviour that concerns the invention of novel and beneficial ideas (Amabile, 1988; Oldham & Cummings, 1996). Moreover, Woodman, Sawyer, and Griffin (1993) argue that innovative behaviour is beyond creative behaviour because innovative behaviour includes the adoption of others' ideas that are new to an individual's organization. Indeed, innovative behaviour emphasizes both the generation and application of new ideas (Shalley, Zhou, & Oldham, 2004).

Previous studies confirmed that psychological empowerment influences innovative behaviour (Abukhait, Bani-Melhem, & Zeffane, 2018; Javed et al., 2018; Singh & Sarkar, 2018). Psychological empowerment is a motivational construct that developed from Kanungo's (1982) theory of empowerment. Psychological empowerment occurs when an employee feels powerful (Menon, 2001). Spreitzer (1995) contends that psychological empowerment consists of four job-related cognitions, namely meaning, competence, impact, and self-determination. Meaning refers to an alignment between an individual's values with his/her job. Competence refers to the confidence in one's very own capacity to conduct his/her job and it is theoretically similar to Bandura's (1977) concept of self-efficacy. Impact refers to the influence an individual thinks s/he has made through his/her job. Self-determination is the degree for decision-making/independence over his/her job.

Meaning and Innovative Behaviour

Employees' opinion concerning the meaningfulness of their duty affects their innovative behaviour. Employees are willing to commit innovative behaviour if the worth of their objectives is aligned to their personal values. Past studies concluded that meaningfulness of work encourages employees to be more innovative (Bass, 1985; Singh & Sarkar, 2012).

H₁: Meaning influences innovative behaviour

Competence and Innovative Behaviour

According to Bandura's (1977) theory of self-efficacy, employees who believe they are able to do their work will behave more innovatively. In fact, Spreitzer's (1995) study shows that competence has better correlation with innovative behaviour than the other three dimensions of psychological empowerment. Furthermore, individuals that believe they have high

competence tend to be more creative.

H₂: Competence influences innovative behaviour

Impact and Innovative Behaviour

Besides competence, Spreitzer (1995) concludes that impact relates with innovative behaviour. When employees feel that their duty impacts others then they will produce more innovative behaviour. Indeed, Knol and Linge's (2009) research demonstrates that impact has the highest effect on nurses' innovative behaviour. Yet, the influence of this dimension depends on whether the output is visible and easily assessable (Singh & Sarkar, 2012). Additionally, for employees who are conscious of their status, the effect of impact on innovative behaviour tends to be higher.

H₃: Impact influences innovative behaviour

Self-determination and Innovative Behaviour

As self-determination offers flexibility and confidence, it helps employees to investigate new prospects. Employees with higher control over their duty tend to feel that their duty permits them to be more innovative (Ramamoorthy, Flood, Slattery, & Sardesai, 2005). Also, autonomy encourages employees to test new ways or ideas (Ohly, Sonnentag, & Pluntke, 2006) and is positively connected to innovative behaviour (De Jong & Kemp, 2003).

H₄: Self-determination influences innovative behaviour

Job Involvement and Dimensions of Psychological Empowerment

Job involvement is developed based on Allport's (1943) theory of ego involvement and Lodahl and Kejner's (1965) belief that job is an individuals' main life interest. Kanungo (1982) defines job involvement as an employee's cognitive preoccupation, engagement, and concern on his/her present job. Employees who have high levels of job involvement tend to be more engaged cognitively with their job and they try to align their job with their self-concept. In contrast, employees with low levels of job involvement tend to be alienated from their job (Brown, 1996). Previous research showed that meaningful work promotes job involvement (Lambert, 1991; Ooi, Arumugam, Safa, & Bakar, 2007). Also, studies found that competence has significant relationship with job involvement (Yang, Kao, & Huang, 2006). Moreover, employees who feel their job makes a noteworthy contribution to others tend to be more involved with their job (Brown & Leigh, 1996) and employees with high control over their job methods and pace will be more engaged with their job (Elloy, Everett, & Flynn, 1991). In conclusion, dimensions of psychological empowerment are connected with job involvement.

H₅: Meaning influences job involvement

H₆: Competence influences job involvement

H₇: Impact influences job involvement

H₈: Self-determination influences job involvement

Job Involvement and Innovative Behaviour

Employees with high levels of job involvement will commit useful behaviour for their organization (Diefendorff, Brown, Kamin, & Lord, 2002). Indeed, Amabile (1988) considers job involvement as important in enhancing creativity and innovation in organizations. Additionally, job involvement helps employees to control their work and suggest initiatives that will encourage innovative behaviour (Taştan, 2013).

H₉: Job involvement influences innovative behaviour

Based on the above hypotheses, the research conceptual model is showed in Figure 1.

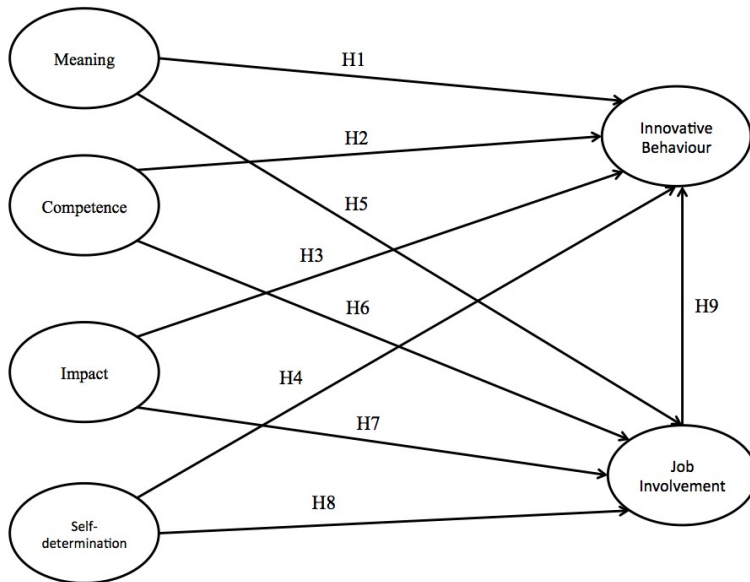


Figure 1. Conceptual Framework

METHODOLOGY

Sampling

This study was conducted for supervisors in an international wheat flour company in Makassar, Indonesia. Their main job description is to supervise their subordinates and department. Mean age of the supervisors was 39-49 years with mean total working experience at the company was > 4 years. Among the supervisors 7% were high school graduates, 91% were graduates, and 3% were postgraduates. The total number of respondents for this study was 75. The profile of the respondents is presented in Table 1.

Table 1
The demographic profile of respondents

Profile		Frequency	Percentage
Gender	Male	61	81.33
	Female	14	18.67

Age	18-38	18	20%
	39-49	24	73%
	≥ 50	5	7%
Education	High school graduates	5	7%
	Graduates	68	91%
	Post graduates	2	3%
Work Experience	< 1	1	1%
	1-2	1	1%
	2-3 years	2	3%
	> 4 years	71	95%

Measures

To measure all research variables, scales were adopted from previous studies. Backward translation as suggested by Tran (2009) was used to ensure that all items in the scales are conceptually equivalent to be used in Indonesia. To measure psychological empowerment, twelve items from Spreitzer's (1995) Psychological Empowerment Scale were adopted. Prior research that implemented this scale was Schermuly et al. (2013) and Singh and Sarkar (2012). Psychological empowerment was defined as an employee's motivational construct that consists of four dimensions, namely meaning, competence, impact, and self-determination. Some sample items were "My job activities are personally meaningful to me", "I am confident about my ability to do my job", "My impact on what happens in my department is large", and "I decide on my own how to go about doing my work".

Job involvement refers to an employee's cognitive preoccupation and participation in his/her current job. One of the most reliable scales to measure job involvement is Kanungo's (1982) scale. Kanungo's job involvement scale was used in Sulander et al. (2016) and Peng (2018). Two examples from this scale were "I live, eat, and breathe my job" and "The major satisfaction in my life comes from my job". Innovative behaviour was defined as an employee's ability to seek and develop new ideas and efforts to implement those new ideas. To measure innovative behaviour, six-items scale from Scott and Bruce (1994) were adopted. Some of the items from the scale were "I generate creative ideas", "I promote and champion ideas to others", and "I develop adequate plans and schedules for the implementation of new ideas". All questionnaires within this study utilized a seven-point Likert scales, ranging from strongly disagree (1) to strongly agree (7).

FINDINGS AND ARGUMENTS

Data Analysis

The research data was analysed by using a two-step method from Hair, Black, Babin, and Anderson (2013). The first step was evaluating all the research constructs, and the second step was testing all the research hypotheses. Partial Least Square (PLS) was selected to be the data analysis tool due to its capability to investigate all the paths in the research model in one simulation (Hair et al., 2013).

Evaluation of Measurement Model

As it can be seen in Table 2, all factor loadings were above 0.7 and all average variance extracted (AVE) were above 0.5 (Hair et al., 2013). In addition, it is shown in Table 3 that all square root values of the AVE are higher than the correlations between the construct and other constructs. Furthermore, Table 4 demonstrated that the item loadings and cross loadings are above 0.7 within their own construct, meaning that all measures' convergent validity are achieved. Hence, it can be said that all the research measures have satisfactory construct validity.

Table 2
Results of the measurement model

Construct	Items	Factor Loading (t) (>0.7)	CR (>0.7)	AVE (>0.5)
Meaning (M)	M1	0.8289	0.8953	0.8605
	M2	0.8771		
	M3	0.8745		
Competence (C)	C1	0.837	0.8872	0.8509
	C2	0.8491		
	C3	0.8663		
Impact (I)	I1	0.8721	0.8967	0.8625
	I2	0.9241		
	I3	0.7856		
Self-determination (S)	S1	0.7983	0.8881	0.8521
	S2	0.888		
	S3	0.8674		
Job Involvement (JI)	JI1	0.8381	0.8994	0.8314
	JI2	0.8541		
	JI3	0.8568		
Innovative Behaviour (IB)	IB1	0.774	0.8962	0.7682
	IB2	0.7543		
	IB3	0.7826		
	IB4	0.7582		

IB5	0.741
IB6	0.7879

Table 3
Means, Standard Deviations, and Correlations among Study Constructs

Construct	Mean	SD	1	2	3	4	5	6
Meaning (M)	5.61	0.33	0.8605					
Competence (C)	5.70	0.46	0.3747	0.8509				
Impact (I)	5.58	0.42	0.4923	0.4919	0.8625			
Self-determination (S)	5.62	0.47	0.5421	0.5294	0.5771	0.8521		
Job Involvement (JI)	5.36	0.44	0.4848	0.4654	0.3013	0.4060	0.8314	
Innovative Behaviour (IB)	5.52	0.59	0.6712	0.4012	0.5372	0.4698	0.5229	0.7682

Table 4
Item Loading and Cross-Loading

Indicator	Impact (I)	Job Involvement (JI)	Self-determination (S)	Competence (C)	Meaning (M)	Innovative Behaviour (IB)
J1	0.1562	0.8381	0.2509	0.3811	0.3419	0.4349
J2	0.2719	0.8441	0.4081	0.4143	0.505	0.4576
J3	0.2687	0.8568	0.3363	0.4024	0.4276	0.4387
J4	0.3076	0.774	0.3484	0.344	0.3141	0.4051
IB1	0.4182	0.2346	0.3029	0.2359	0.3786	0.7543
IB2	0.342	0.4294	0.2881	0.3468	0.4575	0.7826
IB3	0.3867	0.3885	0.3356	0.2437	0.5053	0.7582
IB4	0.3592	0.3062	0.3224	0.2436	0.3683	0.741
IB5	0.5137	0.4707	0.4948	0.3877	0.5407	0.7879
IB6	0.4292	0.5087	0.3777	0.3508	0.5398	0.7843
M1	0.4179	0.4484	0.6148	0.3806	0.8289	0.5902
M2	0.4528	0.3567	0.3753	0.2462	0.8771	0.4727
M3	0.401	0.4328	0.3796	0.3229	0.8745	0.5134
C1	0.3752	0.3671	0.4716	0.837	0.4027	0.4013
C2	0.3563	0.4676	0.4409	0.8491	0.3352	0.2896
C3	0.5369	0.3462	0.4362	0.8663	0.2046	0.3317
I1	0.8721	0.2537	0.4461	0.4839	0.4635	0.5461

I2	0.9241	0.2738	0.4412	0.4145	0.425	0.4735
I3	0.7856	0.2556	0.6538	0.3604	0.3769	0.3414
S1	0.5655	0.2472	0.7983	0.4999	0.4107	0.454
S2	0.4753	0.3321	0.888	0.4083	0.4527	0.3445
S3	0.441	0.4412	0.8674	0.4432	0.5122	0.3987

Results of Hypotheses Testing

The results of hypotheses testing are shown in Table 5. As it can be seen, two dimensions of psychological empowerment, namely meaning and impact, influenced innovative behaviour (path coefficient = 0.3425 and 0.2786; t value = 3.1329 and 2.2915). Moreover, meaning also had a significant effect on job involvement (path coefficient = 0.3562; t value = 2.5350). Although competence did not affect innovative behaviour, it affected job involvement (path coefficient = 0.3270; t value = 1.9902). Finally, job involvement influenced innovative behaviour (path coefficient = 0.2651; t value = 2.4384). The results of PLS analysis are illustrated in Figure 2.

Table 5
Hypothesis Test Results

Hypothesis	Path	Path Coefficient	t -Value	p values	Results
H1	M \rightarrow IB	0.3425	3.1329	0.000	Supported
H2	C \rightarrow IB	0.0059	0.0434	0.000	Not Supported
H3	I \rightarrow IB	0.2786	2.2915	0.000	Supported
H4	S \rightarrow IB	0.0126	0.0925	0.000	Not Supported
H5	M \rightarrow JI	0.3562	2.5350	0.000	Supported
H6	C \rightarrow JI	0.3270	1.9902	0.000	Supported
H7	I \rightarrow JI	-0.0868	0.6374	0.000	Not Supported
H8	S \rightarrow JI	0.0899	0.6997	0.000	Not Supported
H9	JI \rightarrow IB	0.2651	2.4384	0.000	Supported

Table 6
Summary of Results

Dimensions of psychological empowerment	Direct and indirect effects on innovative behaviour
Meaning	<i>Partial mediation</i> : both direct effect on innovative behaviour and indirect effect through job involvement exist.
Competence	No direct and indirect effect on innovative behaviour
Impact	<i>Partial mediation</i> : both direct effect on innovative behaviour and indirect effect through job involvement exist.
Self-determination	<i>Complete mediation</i> : no direct effect on innovative

behaviour and the effect on innovative behaviour is only through job involvement.

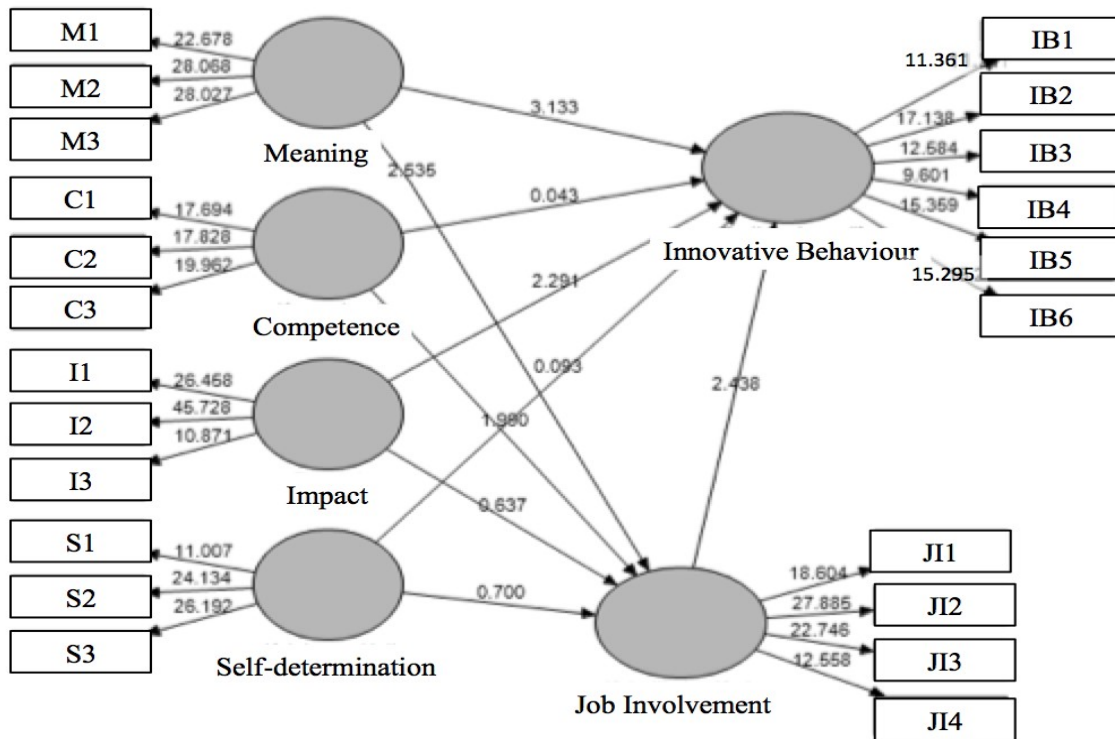


Figure 2

Results of SEM-PLS Analysis

Discussions

Drawing on the Social Cognitive Theory (Bandura, 1986), this research attempts to examine the relationship between psychological empowerment and innovative behaviour. Past research argue that empowered employees will behave more innovatively. Indeed, this study examines the link between each dimension of psychological empowerment with innovative behaviour in the context of wheat flour private sector. Based on Table 3, meaning has third highest mean among the dimensions demonstrating that supervisors feel that their job is important for them. The results of hypotheses show that meaning influences innovative behaviour. Additionally, when supervisors feel their job is meaningful, they tend to be more involved with their job that leads to innovative behaviour. These findings are relevant with Singh and Sarkar's (2012) study on teachers. Our study offers an essential contribution that despite the differences in countries (India and Indonesia) and type jobs (education and business); meaningfulness of work encourages innovative behaviour directly and also indirectly through job involvement.

The highest mean value for competence shows that supervisors consider they are competent to do their job. We had suggested that employees with higher competence behave more innovatively (Spreitzer, 1995) through job involvement. Yet, our results demonstrated that competence has no effect on innovative behaviour of supervisors. This finding is different with the findings of Knol and Linge's (2009) study on nurses. However, it is consistent with Singh and Sarkar's (2012) results in the context of teachers. It is argued that since most supervisors in this study are graduates and post graduates they may think that they are qualified for their job and thus they are confident with their competence. In contrast, there is also a chance that they do not take adequate training and development to improve their skills (Ramachandran, Pal, Jain, Shekhar, & Sharma, 2005; Singh & Sarkar, 2012) and hence they may not be exposed to methods or ways that can assist them to be more innovative or involved with their job.

Impact has the lowest mean value. This indicates that supervisors feel moderately low on this dimension. This reflects that supervisors perceive that they may not have control over what happens in their department. These results are in line with Knol and Linge's (2009) study in which impact had the highest influence on nurses' innovative behaviour. In contrast, these results are contrary to the findings of Singh and Sarkar's (2012) study on teachers' innovative behaviour in India. Moreover, based on the results, supervisors with high impact tend to behave innovatively when they are involved with their job. In Indonesia, supervisors at a reputable company usually obtain good compensation. Supervisors' impact also gets strengthened as their job offers higher social status. Also, their rewards are linked with their performance appraisal. Hence, supervisors are able to observe their impact and this will increase their innovative behaviour.

Self-determination has the second highest mean value. This demonstrates that supervisors perceive that they have moderately high autonomy in conducting their job. Complete mediation within self-determination dimension highlights the role of job involvement. Self-determination leads to innovative behaviour through job involvement. These findings contradict previous studies that self-determination directly links with innovative behaviour (De Jong & Kemp, 2003; Singh and Sarkar, 2012). It is possible that the differences in cultures and job position affect our study's results. Indonesia has high power distance culture meaning that power is centralized and subordinates are expected to obey their direct boss (Hofstede Insight, 2019). Hence, supervisors as leaders have sufficient flexibility and control to conduct their jobs and they would be more innovative when this situation is also supported by their involvement with their jobs. It is essential for organizations to promote job involvement in order to increase innovative behaviour.

Our study offers two important contributions regarding dimensions of psychological empowerment and innovative behaviour for supervisors in the business setting. Firstly, supervisors need to feel meaningfulness of work and impact on what they do in order to

encourage innovative behaviour. Secondly, not all dimensions of psychological empowerment will lead to innovative behaviour.

CONCLUSIONS

Caution is needed when interpreting the results as this study has several limitations. Firstly, the samples were limited to supervisors at one private organization in Indonesia; and, thus, the results may not apply in other industries or countries. Although it is limited, this study was conducted within a managerial position. Secondly, we used self-report scale to measure innovative behaviour (only from the supervisors' point of view). Future research is encouraged to include direct boss/managers' and other stakeholders such as subordinates' evaluation to obtain a more holistic view. This study investigates the relationships between dimensions of psychological empowerment and innovative behaviour through job involvement. The results of the study demonstrated that both intrinsic values (meaningfulness of work) and work processes and culture (impact) have direct effect on innovative behaviour and indirect effect through job involvement.

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