

Innovative Work Behavior: The Role of Job Crafting and Job Autonomy Mediated by Work Engagement

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Abstract

This research aimed to determine the effect of job crafting and job autonomy on innovative work behavior mediated by work engagement. It was conducted at a banking company in Semarang, Central Java. Respondents were selected from which company using a non-probability sampling technique, namely saturation sampling. An online questionnaire was distributed to 100 workers with permanent employee statuses. This study took a quantitative approach, where the data analysis was undertaken using the PLS-SEM method in SmartPLS 4. The results show that (i) Job autonomy has a positive and significant effect on innovative work behavior, while job crafting does not significantly affect innovative work behavior. (ii) Work engagement does not mediate the influence of job autonomy on innovative work behavior, but it fully mediates the influence of job crafting on innovative work behavior.

Keywords: Innovative Work behavior, Job Autonomy, Job Crafting, Work Engagement.

1. Introduction

Nowadays, certain organizations must be able to innovate. Organizations need to innovate to face the shift from an economic era to a very dynamic, creative industry era (Pradana & Suhariadi, 2020). Organizations that can create innovation will have a competitive advantage and be able to compete in the era of creative industries. Innovation does not arise by itself but comes from the creative ideas of each member of a particular organization when facing problems related to their work (Afsar et al., 2017). Implementing these creative ideas is also interpreted as innovative work behavior (Akram et al., 2018).

Innovative work behavior is individual behavior that aims to achieve initiation and intentional introduction (in a work role, group, or organization) to a new and valuable idea, process, product, or procedure (West & Farr, 1990). It concerns discovering, proposing, and implementing new and useful work-related ideas (De Spiegelaere et al., 2014). As one of the dynamic sectors and closely related to innovation, banking certainly requires creative and flexible individuals to face major changes due to technological advances.

Previous studies have described several factors that influence innovative work behavior, including 1) The study by Afsar et al. (2019) and Kaur and Rahmadani (2023) regarding employee behavior in the hospitality sector, stating that job crafting affects innovative work behavior positively and significantly; 2) The research by De Spiegelaere et al., (2014), Amankwaa, Gyensare and Susomrith (2019), as well as Suseno, Standing, Gengatharen, and Nguyen (2020) regarding the behavior of banking and government employees, concluding that there is a positive and signi-

ficant influence of job autonomy on innovative work behavior; 3) The inquiry by Garg and Dhar (2017), Afsar et al., (2020), as well as Pal and Patra (2021) regarding employee behavior in multinational companies, showing that work engagement has a posi tive and significant effect on innovative work behavior.

However, several other studies revealed different results, including 1) The study by Pradana and Suhariadi (2020) on the culinary sector, showing that job crafting affects innovative work behavior negatively and significantly; 2) The inquiry by Garg and Dhar (2017) about the behavior of banking employees, explaining that job autonomy does not fully have a significant effect on innovative work behavior; 3) The research by Izzatuddin and Kusumastuti (2021) and Ningrum and Abdullah (2021) Regarding the behavior of teachers and employees of an Islamic bank concludes that work engagement does not have a significant effect on innovative work behavior.

The results of such previous studies became the basis for determining variables due to the gap in research results between job crafting and job autonomy with innovative work behavior and the need for further research that links these variables with work engagement as mediation to clarify the influence among the variables. The selection of variables is also based on social cognitive theory emphasizing dynamic interactions among personal, environmental, and individual behavioral factors. In this case, job crafting is seen as a personal factor, job autonomy and work engagement as environmental factors, and innovative work behavior as individual behavior. This research links the phenomenon of flexible work arrangements, therefore considered as Novelty Share research results.

Flexible working arrangements are alternative work arrangements that allow employees to determine and control any form of flexibility, such as work schedules or hours, number of jobs, and workplaces (Chen & Fulmer, 2018). In Indonesia, the concept is widely used in creative industry sectors such as media, advertising agencies, and market research institutions (Simamora et al., 2019). Implementing flexible working arrangements in the banking sector has increased, especially in the post-Covid-19 pandemic era. Its implementation provides changes in the work activities carried out by employees; this can also trigger changes in employee behavior.

Job crafting is the behavior of employees that encourages them to perform (Bakker et al., 2016). It can be seen as employees' proactive behavior in making changes to their work to make it more meaningful, enjoyable, and fulfilling (Ranihusna et al., 2022). It is done to take control of methods, scope, and results, reduce daily stress in the workplace, and create a work climate to work happier and more motivated (Chang et al., 2021). Moreover, job-crafting employees tend to have innovative behaviors (Wingerden & Poell, 2017).

Job autonomy can be interpreted as the extent to which work can provide freedom, independence, and authority to employees in regulating how to complete their work (Johari et al., 2016). It can be explained as a form of independence in completing employee duties and responsibilities (Malinowska et al., 2018). Employees with high autonomy tend to enjoy their activities compared to those without adequate freedom (Oluwaseun & Boboye, 2017). Arguably, job autonomy is one factor that determines employees' innovative behavior (Dara et al., 2022).

Work engagement is a positive and satisfying mental state related to work, characterized by enthusiasm and dedication (Szilvassy & Širok, 2022; Marleyna et al., 2022). It can also be interpreted as a characteristic of commitment, great desire, and initiative (Noviardy & Sabeli, 2020). Employees who have attachments tend to exhibit better performance, which is beneficial to the organization (Prayogi & Fahmi, 2021). Those engaged in their work tend to be more enthusiastic about learning and developing new ideas needed to achieve their goals, leading to triggering innovative work behavior.

The company selected as the object of the research is PT XYZ, a banking company in Semarang City. A banking company that is very dynamic towards technological advances certainly requires employees who are not only qualified but also innovative. To adapt to technological advances, especially in the era of digitalization, companies need to create an atmosphere and working conditions that encourage employees to perform optimally. The implementation of flexible work

arrangement policies by the company changes its activity patterns and impacts its performance. According to information from several employees, the policy grants them more freedom in determining how to complete work. Nevertheless, flexible work arrangements in some divisions create a bit of confusion since they are not used to it, requiring them to adjust themselves to the new work system. Additionally, the autonomy granted by the company is still limited to the scope of the work owned by employees, not as a whole. This causes some declination in innovative behavior that will impact company performance.

The statements as mentioned above constituted an urgency to conduct this research because, in the new normal era, the recent implementation of flexible work management policies by many companies will certainly impact job crafting and job autonomy, as well as employee engagement in innovative work behavior.

Research problems that arise based on previous explanations include: (1) Does job crafting positively affect innovative work behavior?; (2) Does job autonomy positively affect innovative work behavior?; (3) Does work engagement positively affect innovative work behavior?; (4) Does job crafting positively affect job engagement?; (5) Does job autonomy positively affect work engagement?; (6) Does work engagement mediate the influence of job crafting on innovative work behavior?; (7) Does work engagement mediate the effect of job autonomy on innovative work behavior? The research problems provide an overview of the purpose of this study, namely, to examine the effect of job crafting on work engagement and innovative work behavior, examine the effect of job autonomy on work engagement and innovative work behavior, and examine the role of work engagement as a mediator of the influence between job crafting and job autonomy on innovative work behavior.

The results of this research are expected to enrich the literature in human resources science, particularly in job crafting and innovative work behavior. This study also added the variable of work engagement as a mediator in the research model and linked it with social cognitive theory as the novelty. Related companies are also expected to benefit by considering the results of this research in decision-making regarding the scope of human resources, especially in terms of job autonomy. The decision taken based on the results of this study is expected to have a positive impact on related companies.

2. Literature Review

2.1. Social Cognitive Theory

Social cognitive theory by Bandura (1986) is an interpersonal-level theory that emphasizes dynamic interactions among personal factors, environmental factors, and individual behavior. It considers the unique way individuals acquire and maintain their behaviors

while considering the social environment in which they perform such behaviors. The application of social cognitive theory illustrates that innovative work behavior (behavior) has a relationship with job crafting (personal factors), job autonomy, and work engagement (environmental factors). In this study, the context of the relationship that occurs among personal factors, environmental factors, and behavior is not only limited to relationships but to the influence they have.

2.2. Innovative Work Behavior (IWB)

Innovative work behavior is the ability of individuals to produce potential and original valuable ideas, including the process of applying these ideas to practice (Birdi et al., 2016)Organizational innovation will benefit from individuals who are sensitive to change, willing to continue to develop knowledge, able to generate new solutions and ideas, and willing to improve their work. (Høyrup, 2012). It can be said that the innovative work behavior of employees in a company will encourage innovation in its work process. (Prasetyono et al., 2022). According to Dara et al., (2022)Innovative work behavior has three dimensions: idea generation, promotion, and realization. The dimension of generation is characterized by creating new ideas (IWB.1), finding new work methods (IWB.2), and generating original solutions (IWB.3). The dimension of promotion is manifested in mobilizing support (IWB.4), acquiring approval of ideas (IWB.5), and showing enthusiasm for ideas (IWB.6). Whereas, the dimension of realization is characterized by transforming (IWB.7), introducing (IWB.8), and evaluating the usefulness of ideas (IWB.9).

2.3. Job Crafting (JC)

Job crafting is defined as changes that employees may make concerning the demands of their job and job resources (Tims & Bakker, 2010). They can align the demands of the job and the resources of the job they have with their abilities and preferences (Sharma & Nambudiri, 2020). Ranihusna et al. (2022) further explained that job crafting is based on employees' initiative. Those who implement job crafting tend to be more adaptable to the work environment and more confident, resulting in improved performance (Wingerden & Poell, 2017). Hence, job crafting can be defined as the behavior of employees based on their initiative to complete work following the abilities and conditions of the job. Siddiqi (2015) asserted that job crafting has four dimensions: increasing job resources, reducing demands on the job, improving social relations, and improving the ability to work on challenging tasks. Increasing job is characterized by developing the

ability to work (JC.1) and learn new things at work (JC.2). Reducing demands on the job is shown through avoiding complicated decisions (JC.3) and ignoring emotionally affecting co-workers (JC.4). Improving social relations, is actualized by asking for input or suggestions to superiors (JC.5) and colleagues related to work (JC.6). Whereas, improving the ability to work in challenging things is manifested in doing additional tasks (JC.7) and doing new things (JC.8).

2.4. Job Autonomy (JA)

Job autonomy is the extent to which employees are given freedom in scheduling their work without limitations and independence to carry out their duties and work activities (Chiniara & Bentein, 2016). It allows them to regulate their feelings and behaviors to achieve goals based on espoused values (Wu et al., 2015). According to Ho and Nesbit (2014), work autonomy is a condition where work gives employees wisdom, freedom, and independence in completing the work given. Such autonomy allows them to experiment with different approaches and methods of working (De Spiegelaere et al., 2014). Accordingly, job autonomy can be interpreted as a condition where employees can work with the authority and freedom given. According to Dara et al. (2022), job autonomy has three dimensions: autonomy of work methods, work scheduling, and work criteria. The dimension of work methods is characterized by the freedom to determine work procedures (JA.1) and methods independently (JA.2). The dimension of work scheduling is manifested in employee freedom in managing work schedules (JA.3) and working hours (JA.4). Whereas, the dimension of work criteria is characterized by the flexibility that employees have in determining how to work (JA.5) and the duration of work (JA.6).

2.5. Work Engagement (WE)

Work engagement is when individuals become fully engaged in their work and experience feelings of involvement, passion, and positive energy in carrying out their duties (Bakker & Albrecht, 2018). It is the positive attitude of employees and the company (commitment, participation, and engagement) toward cultural values and success (Prahara, 2020). Wood et al. (2020) further delineated that work engagement is a positive experience when a person feels in control, interested in his work, and empowered and competent to carry out his duties. Overall, work engagement refers to individuals' emotional, cognitive, and behavioral involvement, which drives high productivity, creativity, and job satisfaction (Marleyna et al., 2022). According to Schaufeli and Bakker (2004), the dimensions used

to evaluate work involvement include enthusiasm, dedication, and passion. Enthusiasm is characterized by high enthusiasm at work (WE.1), sincerity in trying to work (WE.2), and perseverance in facing various kinds of difficulties (WE.3). The dimension of dedication is denoted by feelings of enthusiasm (WE.4), inspiration (WE.5), pride (WE.6) and challenge (WE.7). It has a broader scope, referring not only to beliefs or cognitive states but also to emotional states. The dimension of passion is shown through a complete and deep concentration of the mind on work (WE.8), leading the work done to become interesting and efficient (WE.9).

2.6. Hypothesis Formulation

This study attempted to reject the results of previous investigations, including 1) The study by Pradana and Suhariadi (2020) on the culinary sector, stating that job creation affects innovative work behavior negatively and significantly; 2) The inquiry by Garg and Dhar (2017) regarding the behavior of banking employees, explaining that work autonomy does not fully have a significant effect on innovative work behavior; 3) The research by Izzatuddin and Kusumastuti (2021) and Ningrum and Abdullah (2021) about the behavior of teachers and employees of Islamic banking, concluding that work involvement does not have a significant effect on innovative work behavior. Such studies do not reflect the sustainability of flexible working arrangements, so this study formulated the hypotheses using the results of other studies as described below:

- H₁: Job crafting positively influences innovative work behavior.
- H₂: Job autonomy positively affects innovative work behavior
- H₃: Job crafting positively affects job engagement.
- H₄: Job autonomy positively affects work engagement.
- H₅: Work engagement positively influences innovative work behavior.
- H₆: Work engagement mediates the influence of job crafting on innovative work behavior.
- H₇: Work engagement mediates the effect of job autonomy on innovative work behavior.

3. Methods

This study is an explanatory study that aims to explain the influence among independent variables (job crafting and job autonomy), dependent variables (innovative work behavior), and mediation variables (work engagement). The sample in this study amounted to 100 employees working in one of the banking com-

panies in Semarang City, with a sampling technique in the form of a census. Questionnaires were employed to collect the data. The questions asked in the questionnaire are structured using the Likert measurement scale (1-5). The data obtained was then processed using the SEM-PLS (Structural et al.) method through the SmartPLS 4 software.

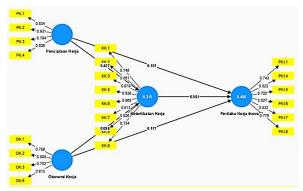


Figure 1. Research model

4. Result

This current research on 100 respondents produced several findings. Regarding their gender, Table 1 shows that most respondents are male (76%). The highest data acquisition based on their age range comes from the age group > 31 years (68%). The highest data is obtained from the group of working > 6 years (69%).

Table 1. Descriptive analysis

Paran	Frequency	%	
Gender	Male	76	76%
	Female	24	24%
Age	< 25 years	5	5%
	26 - 30 years	27	27%
	> 31 years	68	68%
Length of Work	< 2 years	11	11%
	3 - 4 years	12	12%
	4 - 5 years	8	8%
	> 6 years	69	69%

Source: Research Results, 2024

Referring to Table 2, all variables measured through measurement items have an outer loading value of > 0.7, which indicates good convergent validity. They also have Cronbach's Alpha and Composite Reliability values > 0.7, which indicates that all the variables meet the reliability criteria. The AVE value owned by all the variables is> 0.5, which indicates strong convergent validity.

Table 3 shows the Heterotrait-Monotrait (HTMT) test results for each construct having a value of < 0.9. Based on these results, it can be concluded that all variables have discriminant validity.

Table 2. Outer model

Items	Outer Loading	Cronbach's Alpha	CR	AVE		
IWB.1	0.743	0.878	0.908	0.622		
IWB.4	0.823					
IWB.5	0.722					
IWB.6	0.827					
IWB.7	0.832					
IWB.8	0.776					
JC.1	0.834	0.862	0.907	0.710		
JC.2	0.931					
JC.3	0.794					
JC.4	0.806					
JA.1	0.789	0.842	0.892	0.674		
JA.2	0.895					
JA.3	0.782					
JA.6	0.813					
WE.1	0.746	0.943	0.953	0.721		
WE.2	0.861					
WE.3	0.879					
WE.5	0.838					
WE.6	0.968					
WE.7	0.813					
WE.8	0.926					
WE.9	0.734					

Source: Research Results, 2024

Table 3. Heterotrait-monotrait ratio

	JC	JA	WE
IWB	0.503	0.447	0.701
JC		0.570	0.493
JA			0.323

Source: Research Results, 2024

Table 4. Structural VIF

	IWB	WE
JC	1.548	1.338
JA	1.350	1.338
WE	1.274	

Source: Research Results, 2024

Table 5. Structural model

	Path	P-	Lower	Upper	F-
Co	efficient	value	Limit	Limit	square
H_1	0.101	0.215	-0.058	0.262	0.013
H_2	0.177	0.019	0.044	0.338	0.045
H_3	0.407	0.000	0.243	0.571	0.157
H_4	0.098	0.331	- 0.096	0.296	0.009
H_5	0.561	0.000	0.412	0.687	0.481

Source: Research Results, 2024

Table 4 shows the structural VIF test results for each variable having a value of < 5. Based on these results, it can be concluded that the parameter estimation results in SEM PLS are *robust* (unbiased).

Based on the results of hypothesis testing in Table 5, it is known as follows:

- 1. The first hypothesis (H_1) is rejected, namely that there is no significant influence between job crafting and innovative work behavior.
- 2. The second hypothesis (H₂) is accepted, namely that there is a positive and significant influence between job autonomy and innovative work behavior.
- 3. The third hypothesis (H₃) is accepted, namely that there is a positive and significant influence between job crafting and work engagement.
- 4. The fourth hypothesis (H₄) is rejected, namely that there is no significant effect between job autonomy and work engagement.
- 5. **The fifth hypothesis (H₅) is accepted**, namely that work engagement and innovative work behavior have a positive and significant influence.

Table 6. Mediation effect

_	Path efficient	P- value	Lower Limit	Upper Limit	Upsilon- V
H_6	0.228	0.000	0.130	0.341	0.052
H_7	0.055	0.332	-0.055	0.168	0.003

Source: Research Results, 2024

Based on the results of hypothesis testing in Table 6, it is known as follows:

- 1. The sixth hypothesis (H₆) is accepted, i.e. work engagement can significantly mediate the influence of job crafting on innovative work behavior.
- 2. The seventh hypothesis (H₇) is rejected, i.e. that work engagement cannot significantly mediate the effect of job autonomy on innovative work behavior.

Table 7. Standardized root square mean residual

	Model Estimation
SRMR	0,097
Source: Research Results, 2024	

Table 7 shows the results of SRMR testing that illustrates the fit of the proposed model, where empirical data are tested for feasibility in explaining the influence between variables. Based on these results, it can be concluded that the model has a good fit or $acceptable \, fit \, (0.097 < 0.10)$.

5. Discussion

5.1. The Effect of Job Crafting on Innovative Work Behavior

The outcomes of the direct influence analysis with the PLS-SEM method in this study show the results of p-value values of 0.215 > 0.05, so it can be concluded that the first hypothesis (H1) was rejected. These results mean that there is no significant influence between job crafting and innovative work behavior. According to Bakker et al. (2016), job crafting is the behavior of

employees that encourages them to perform and have innovative work behavior. This study refutes this opinion because even though companies have implemented a flexible work system, the work process carried out by employees has not changed. They tend to do job crafting rarely. This statement is supported by an external loading value for the indicator of learning new things that is high (0.931). However, it is not in line with the proactive attitude of the employees who have a value that is below average (0.794), so even if employees learn new things but do not apply them through a proactive attitude, they will not have innovative work behavior. The results of this study truly show differences in results with the previous studies which state that job crafting has a positive effect on innovative work behavior (Afsar et al., 2019; Kaur & Rahmadani, 2023; Pradana & Suhariadi, 2020).

5.2. The Effect of Job Autonomy on Innovative Work Behavior

The results of the direct influence analysis with the PLS-SEM method in this study indicate p-value results of 0.019 < 0.05, so it can be concluded that the second hypothesis (H2) was accepted. These results mean that there is a positive and significant influence between job autonomy and innovative work behavior. Job autonomy is proven to trigger employees to be more innovative at work positively (Amankwaa et al., 2019). In line with that, Suseno et al. (2020) explained that the freedom to determine task characteristics and work design is important in motivating employees to innovate. The statement is supported by the external loading value for the indicator of authority to regulate work methods (0.895), and the authority to determine working days (0.813) has a high value; so, employees with job autonomy have innovative work behavior. This study's results align with previous studies, which state that job autonomy positively affects innovative work behavior (Amankwaa et al., 2019; De Spiegelaere et al., 2014; Suseno et al., 2020). This study also refutes the results of the previous research, which concludes that job autonomy does not fully have a significant effect on innovative work behavior (Garg & Dhar, 2017).

5.3. The Effect of Job Crafting on Work Engagement

The results of the direct influence analysis with the PLS-SEM method in this study show p-value results of 0.000 < 0.05, so it can be concluded that the third hypothesis (H3) was accepted. These results mean job crafting and engagement have a positive and significant influence. Employees who do job crafting will be involved in their work (Sharma & Nambudiri,

2020). In other words, the higher the job crafting of employees, the higher their work engagement will be (Noviardy & Sabeli, 2020). This is supported by the outside loading value for the indicators of learning new things (0.931), and feeling happy (0.926), which has a high value; thus, job-crafting employees have work engagement. This study's results align with previous studies, which affirm that job crafting has a positive effect on work engagement (Aini, 2022; Vermooten et al., 2019).

5.4. The Effect of Job Autonomy on Work Engagement

The results of the direct influence analysis with the PLS-SEM method in this study display p-value results of 0.331 > 0.05, so it can be concluded that the fourth hypothesis (H4) was rejected. These results mean that there is no significant effect between job autonomy and work engagement. According to Spiegelaere et al., (2016), employees with job autonomy will tend to manage their work independently, so they will be fully involved. This study actually refutes this opinion because although companies have implemented flexible work systems and employees have autonomy, this autonomy has limitations in its implementation causing them not to be fully involved in managing their work. This statement is supported by the external loading value for the indicator of authority to regulate work dynamics (0.782) and difficulty to break away (0.734), which has a value below the average. Hence, although employees are given autonomy, it is minimal, and they tend to disengage from work due to the target system easily; so, once the target is achieved, they can disengage from work. This study's results show differences from previous studies, which deduce that job autonomy positively affects work engagement (Jhody & Fitria, 2022; Malinowska et al., 2018).

5.5. The Effect of Work Engagement on Innovative Work Behavior

The results of the direct influence analysis with the PLS-SEM method in this study indicate p-value results of 0.000 < 0.05, so it can be concluded that the fifth hypothesis (H5) was accepted. These results mean that there is a positive and significant influence between work engagement and innovative work behavior. Well-implemented work engagement will result in a competitive advantage for any company because every individual in it is an aspect that is difficult for competitors to replicate (Fiernaningsih et al., 2023). Hoyrup (2012) also contended that employees who are sensitive to change and constantly involved in deve-

loping knowledge would generate new solutions and ideas. The statement is espoused by outside loading values for indicators of hard work and feeling happy at work (0.968), and feeling happy at work (0.926) has high values. Hence, employees with work engagement have innovative work behavior. This is due to the previous studies, which state that work engagement positively affects innovative work behavior (Afsar et al., 2020; Garg & Dhar, 2017; Pal & Patra, 2021). This study also refutes the results of the previous inquiries, which infer that work engagement does not significantly affect innovative work behavior (Izzatuddin & Kusumastuti, 2021; Ningrum & Abdullah, 2021).

5.6. The Effect of Job Crafting on Innovative Work Behavior Mediated by Work Engagement

The results of the indirect influence analysis with the PLS-SEM method in this study exhibit the results of p-value values of 0.000 < 0.05, so it can be concluded that the sixth hypothesis (H6) was accepted. These results mean that work engagement can mediate the influence of job crafting on innovative work behavior. This statement is supported by a higher mediation patch coefficient value than the direct effect (0.228 > 0.101). However, the influence resulting from mediation or indirect influence is relatively low when viewed from the value of upsilon-v (0.052 < 0.075). This study's results align with previous studies stating that work engagement mediates the influence of job crafting on innovative work behavior (Chen et al., 2014; Inam et al., 2021; Siddiqi, 2015).

5.7. The Effect of Job Autonomy on Innovative Work Behavior Mediated by Work Engagement

The indirect influence analysis with the PLS-SEM method in this study presents p-value results of 0.332 > 0.05, so it can be concluded that the seventh hypothesis (H7) was rejected. These results mean that work engagement cannot mediate the effect of job autonomy on innovative work behavior. This statement is supported by a lower mediation coefficient patch value than the direct effect (0.055 < 0.177). On the other hand, the amount of influence resulting from mediation relationships or indirect influences is classified as having no influence or can be ignored when viewed from the value of upsilon-v (0.003 < 0.01). The results of this study refute the findings of the previous studies which deduce that work engagement mediates the effect of job autonomy on innovative work behavior (De Spiegelaere et al., 2014; Jhody & Fitria, 2022).

6. Conclusions

Several conclusions can be drawn from the results of this study: (1) Job crafting does not significantly affect innovative work behavior but does affect work engagement; (2) Job autonomy does not significantly affect work engagement but affects innovative work behavior; (3) Work engagement has a significant effect on innovative work behavior; (4) Work engagement mediates the effect of job crafting on innovative work behavior but cannot mediate the effect of job autonomy on innovative work behavior. To increase innovative work behavior, managers are also expected to pay attention to each employee's job autonomy by somewhat relaxing the boundaries of employee job autonomy. In order to further strengthen the role of employee participation in companies, it is necessary to strengthen the role of managers as task supervisors and implement activities that promote a sense of participation, such as vocational training and employee sports weeks. This research has answered all the research problems, yet limitations remain. Thus, further research needs to be carried out in the future. This study has not conducted a finite mixture partial least squares (FIMIX-PLS) test, so it cannot confirm heterogeneity and endogeneity in the data displayed. Moreover, it only opted for samples from one company, denoting that the study's results could not be generalized.

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