

The effects of job crafting and engagement in improving the performance of micro, small and medium enterprises

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Purpose: Previous studies have found mixed results regarding the effect of job crafting (JC) on employee engagement (EE) and employee performance (EP). JC was also influenced by the type of work and tenure. Therefore, the present study examined the relationship between JC and EE in increasing in-role (IRP) and extra-role performance (ERP). Additionally, it analyses JC on manufacturing and service micro, small and medium enterprise (MSME) and differences in tenure.

Design/methodology/approach: The study was conducted using 1032 employees who work in MSME in Indonesia, especially in Yogyakarta. Validity and reliability tests were carried out for the questionnaire, and Chi-square was used to test the JC difference for the type of work, analysis of variance was used to test the JC difference on tenure, and structural equation modeling (SEM) to analyze the relationship model.

Findings/results: The results of SEM with a two-step approach found that EE mediated the effect of JC on performance. Depending on the type of work performed, the challenges of manufacturing companies differed from those of service companies. The tenure also distinguished the JC that was carried out.

Practical implications: Job crafting is a phenomenon of employee creativity that is important for achieving a good fit in the workplace and increase EE and EP. The human resources department needs to optimize this concept by regulating the procedures for conducting JC.

Originality/value: The results found that the effect of JC was only on IRP and was different, negative, positive and insignificant. Furthermore, JC is proven not to affect ERP.

Keywords: employee engagement; extra-role performance; in-role performance; job crafting; MSMEs.

Introduction

The reasons employees feel comfortable working in one organisation are related to the environment, communication and remuneration (Arachi et al., 2021). In the past, jobs were designed by the leader (a top-down approach) and were undeniable. In its development, job design with this approach is no longer effective in increasing employee engagement (EE) and employee performance (EP). Therefore, a new approach is needed to redesign employee work (Bruning & Campion, 2018). Several studies have proven that a self-directed or bottom-up approach can match work and employee needs (Bakker & Oerlemans, 2019; Debus et al., 2019).

One way to motivate employees is to involve them in redesigning their work (Slemp et al., 2021). Job redesign protects the employees' welfare and improves performance (Hulshof et al., 2020). Job crafting (JC) is a development of the JD-R model that optimises job demand (JD) and job resources (JR) (Bakker & Demerouti, 2017). Several studies have found that JC improves person-environment (P-E) fit (Tims et al., 2016), employee well-being (Kim & Beehr, 2020), EE (Shi et al., 2021), increasing in-role (IRP) and extra-role performance (ERP) (Hakanen et al., 2017), as well as reducing burnout (Petrou et al., 2015) and negative effect (Dierdorff & Jensen, 2018). Job crafting motivates employees by increasing their resources (Hakanen et al., 2017).

Previous results regarding JC's effect on EE were mixed. Some stated that JC has positive effects on EE (Meijerink et al., 2020; Ogbuanya & Chukwuedo, 2017), zero effects (Sakuraya et al., 2020) and negative effects on EE (Petrou et al., 2012). Meanwhile, EE is an antecedent of JC (Inam et al., 2021;

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Robledo et al., 2019; Tan et al., 2020), and this inconsistency in the relationship encourages the need for research to test the model. Furthermore, disagreements were also found among the actors. Job crafting is essential for senior employees (Kooij et al., 2017; Lichtenthaler & Fischbach, 2016), and another study found that youthful individuals like to take proactive actions (Nagy et al., 2019). Some reported the JC differences between manufacturing and service firms (Rudolph et al., 2017; Wrzesniewski et al., 2013).

In addition to EE, JC is often associated with performance to increase efficiency and effectiveness and motivates employees intrinsically (Dubbel et al., 2019; Zhang et al., 2021). It can improve performance because it can expand the boundaries of employees' work; consequently, employees feel autonomy in their job (Kooij et al., 2017; Maden-Eyiusta & Alten, 2021; Wang et al., 2018). Job crafting is a means to maintain employee enthusiasm, active involvement and person-work fit (P-E fit).

Several previous studies have found that EE is associated with IRP and ERP (Park et al., 2020). Employee engagement is a source of motivation for EP (Petrou et al., 2018; Vakola et al., 2021). The results of previous studies indicate that EE is related to and affects positive variables such as well-being, job satisfaction, affective commitment, decreased burnout and increased performance (Agarwal, 2014; Yalabik et al., 2015). Job crafting positively affects motivation and performance because it can develop their work (Lazazzara et al., 2020; Lichtenthaler & Fischbach, 2018; Tims & Parker, 2020; Vakola et al., 2021). This study aims to strengthen the findings based on the results. Firstly, it reexamines JC as an antecedent or consequence of EE. Secondly, it analyses two models of the relationship between JC, EE, and performance, IRP and ERP. In the first model, EE mediates JC and performance (IRP and ERP), while in the second, JC mediates EE and performance (IRP and ERP). Lastly, it examines the differences between JC in manufacturing and service companies.

Literature review and hypotheses

Job crafting is the behaviour of designing one's work to meet the needs and goals of employees by seeking resources and challenges and reducing hindering JDs (Tims & Parker, 2020). In the past, jobs were designed without considering employee input (top-down approach). This approach is no longer appropriate because employees want a positive meaning by creating an identity at work. This can be achieved through the involvement in redesigning or modifying the job according to the wishes of the employees and the organisation (Arachi et al., 2020). The redesign includes physical and cognitive changes related to employees' tasks or job boundaries (Wrzesniewski et al., 2013). Involvement in redesigning jobs generates positive emotions among employees (Constantini et al., 2019) and increases innovation, creativity and well-being (Afsar et al., 2019; Khan et al., 2021).

Job crafting is a theoretical approach to job design that involves employees in a proactive manner (Wrzesniewski et al., 2013). Job crafting is a self-initiated voluntary behaviour

to seek resources and challenges and reduce physical, mental and emotional demands of work to improve EP (Demerouti et al., 2015). It is a new form of job redesign from a top-down to a bottom-up approach according to the wishes and preferences of employees (Hulshof et al., 2020). They need JC to effectively deal with internal and external pressures and organisational changes (Park et al., 2020).

The goal of JC is to obtain and avoid the positive and negative aspects of work (Bruning & Campion, 2018; Zhang & Parker, 2019). The psychological and behavioural outcomes were similar for all employees concerning interests, job qualifications and demands (Wang et al., 2018). Rudolph et al. (2017) found that the effect of JC on performance only occurs in manufacturing companies, which supports the research of Wrzesniewski et al. (2013). Job crafting's success can result in a better person-job fit; hence, employees can develop and act positively in work and life (Rudolph et al., 2017). Many studies have explored the relationship of JC with adaptive and maladaptive outcomes (Bindl et al., 2018; Slempt et al., 2021), but the concept is always associated with positive things (Vogel et al., 2016).

Based on social cognitive theory (SCT), senior employees will effectively carry out JC because of their learning and experience at work (Demerouti et al., 2017). However, the meta-analysis by Rudolph et al. (2017) found that with increasing age, employees are reluctant to conduct JC. Younger workers more often show this proactive conduct to increase the sense of purpose at work (Nagy et al., 2019; Tims et al., 2016).

Various kinds of literature have explored the antecedents and consequences of JC according to the theory that underlies the use of the strategy (Zhang & Parker, 2019). The self-determination theory (SDT) states the need for psychological empowerment in the form of JC, an autonomous motivation that improves performance (Maden-Eyiusta & Alten, 2021). Furthermore, the core of the JD-R theory is the optimal provision of JD and JR for employees (Bakker & Demerouti, 2017). The theory of work adjustment (TWA) explains that work is a continuous and reciprocal interaction process between employees and the environment to optimise performance (Hulshof et al., 2020).

There are three dimensions of JC, namely seeking job resources (SJR), seeking job challenges (SJC) and reducing inhibiting job demands (RJD) (Baig et al., 2022; Gordon et al., 2015). The three dimensions of JC are not mutually exclusive and can be conducted together (Dierdorff & Jensen, 2018). Each dimension also influences employees differently (Bakker & Orlemans, 2019). According to SDT, SJR is in line with satisfying needs for competence and relatedness, while SJC is consistent with fulfilling needs for autonomy (Vogt et al., 2016). Seeking job resources and challenges can improve performance and achieve goals (Gordon et al., 2015), while RJD leads to inconsistent results in performance (Tims et al., 2013). Seeking resources and challenges are effective

JC, known as the approach type, while RJD is ineffective or avoiding (Makikangas & Schaufeli, 2021; Zhang & Parker, 2019). The JC approach consistently has a positive effect, while the avoidance has a negative effect on EE and EP (Dubbelt et al., 2019; Petrou et al., 2018). Some studies found no relationship between JC avoidance and EE and EP (Bruning & Campion, 2018; Lichtenthaler & Fischbach, 2018). Seeking resources can be invested and conserved based on the conservation of resource (COR) theory (Hakanen et al., 2017; Shi et al., 2021). Conservation of resource theory states that individuals seek to obtain and prevent the loss of resources to cope with demands (Lazazzara et al., 2020).

Employee engagement and EP are widely used in research outcomes of workplace employee attitudes (Meijerink et al., 2020). Employee engagement is a positive work state characterised by vigour, dedication and absorption (Schaufeli et al., 2006). It is a source of motivation for EP (Petrou et al., 2018). Employees with high EE can remain motivated to achieve organisational goals despite decreasing resources (Bakker et al., 2016). Engaged employees work passionately and are fully engaged in their work. Employee engagement is a form of intrinsic motivation that builds comfortable and enthusiastic behaviour at work. It includes vigour (i.e. high energy, extra effort and determination to face adversity), dedication (i.e. involvement, interest, enthusiasm, challenge, inspiration) and absorption (i.e. concentration, time passes quickly, difficulty letting go of work) (Demerouti et al., 2017; Green et al., 2017; Vakola et al., 2021). Furthermore, it is negatively related to boredom and procrastination at work (Metin et al., 2018).

Many previous studies have proven the relationship and influence of JC on EE (Allan et al., 2019; Bakker & Oerlemans, 2019; Lazazzara et al., 2020; Moon et al., 2020; Slemp et al., 2021; Tian et al., 2021). In general, JC positively affects EE (Meijerink et al., 2020; Rudolph et al., 2017). By using SJR and SJC, individuals can achieve their goals to feel engaged with the organisation. Some studies found the effect of EE on JC (Bakker et al., 2020; Gray et al., 2020; Hakanen et al., 2017; Imran et al., 2020; Inam et al., 2021; Thao & Kang, 2018). Employees with high involvement will analyse resources and challenges but do not want to reduce the demands of their work (Tan et al., 2020). Meanwhile, Sakuraya et al. (2020) and Van Wingerden et al. (2017) found no influence or relationship between the two constructs, and Petrou et al. (2012) found a negative effect of JC on EE.

The relationship between each dimension of JC and EE is different (Hulshof et al., 2020). Seeking job resources and seeking job challenges are consistently associated positively with EE (Rudolph et al., 2017). Seeking job resources and seeking job challenges increase EE (Borst et al., 2019; Harju et al., 2016), unlike RJD (Bakker & Sanz-Vergel, 2013). Therefore, the reduction of RJD, which is the JC dimension, is positively related to EE (Rudolph et al., 2017). However, some studies have found that the dimension is negatively associated with EE (Dubbelt et al., 2019; Koize & Nel, 2019; Radic et al.,

2020). Other analyses found that a reduction in inhibiting RJD did not affect EE (Tims et al., 2013). According to Tims et al. (2015) and Moon et al. (2020), combining the three dimensions of JC can improve EE and EP. Meanwhile, employees craft their work with SJR, SJC and RJD (Demerouti et al., 2015). According to the COR theory, individuals are motivated to protect and maintain existing resources (Hakanen et al., 2017).

Employee engagement is a surplus of resources; hence, employees with high value will be more proactive in finding resources and challenges (Lu et al., 2014). Based on COR theory, creativity can increase EE. According to social exchange theory (SET), individuals who do not feel engaged in their work will have a low sense of creativity (Bakker & Xanthopoulou, 2013; Kim & Park, 2017). Employee engagement is also a positive predictor for individuals and organisations, such as IRP and ERP performance (Bakker et al., 2012). It was reported that JC improved EP (Gordon et al., 2018; Kooij et al., 2017; Moon et al., 2020; Wang et al., 2018; Zhang et al., 2020), both IRP and ERP (Bavik et al., 2017; Junca-Silva et al., 2022; Khan et al., 2021). Tims et al. (2015) found that SJC was associated with SJR, thereby increasing EE. According to Moon et al. (2020), JC uses SJR and RJD to improve EE and achieve performance.

Meanwhile, EP refers to employee behaviour consistent with organisational goals and is the core of work results (Metin et al., 2018). There are two dimensions, namely IRP and ERP or task and contextual performance (Robbins & Judge, 2016). In-role performance supports organisational functions, aligns with goals and is included in the job description (Gordon et al., 2015). Extra-role performance is a behaviour in the workplace that is not work-related and outside the job description. Furthermore, it contributes to the social and psychological aspects of the organisation (Demerouti et al., 2015). It is voluntary, selfless, intrinsically motivated, and helps organisations maintain their work climate (Bavik et al., 2017). Extra-role performance is not related to IRP but is a means to achieve superior quality, practical operational activities and high customer satisfaction to increase IRP (Bavik et al., 2017).

Previous studies found that EE mediates the effect of JC on performance (Metin et al., 2018; Park et al., 2020; Tims et al., 2013), IRP (Dubbelt et al., 2019) and ERP (Demerouti et al., 2015; Vogel et al., 2016). However, the research results of Van Wingerden et al. (2017) found that EE partially mediated the influence of JC on performance. Seeking job resources and challenges can improve performance directly (Kooij et al., 2017; Petrou et al., 2015) and indirectly through EE (Bakker et al., 2012; Demerouti et al., 2015; Tims et al., 2015). Some studies found that long-term engagement encourages employees to redesign their jobs (Bakker et al., 2020; Gray et al., 2020; Inam et al., 2021).

Based on the theory of planned behaviour (TPB, Ajzen, 1991), JC is a consequence of various long processes experienced by individuals at work. This long process produces EE, which can encourage employees to be proactive in their creativity at the

workplace. Therefore, JC is a behaviour inherent in employees' workflow (Constantini et al., 2022). Employee engagement affects employee creativity in the workplace through JC (Bakker et al., 2020; Thao & Kang, 2018). More specifically, this study provides answers to the following questions:

- Are the three JC dimensions significant predictors of EE and EP for IRP and ERP?
- Is the influence of the three dimensions of JC on IRP and ERP mediated by EE?
- Will employees who feel attached to the company conduct JC, which mediates the influence of EE on IRP and ERP?
- Is there a JC difference between employees of a manufacturing company and a service company?

Samples and procedures

This research sample was for full-time employees working in micro, small and medium enterprises (MSME) in Yogyakarta. The questionnaire was distributed online using Google Forms which was given to the company's owner for distribution to its employees. The questionnaires were distributed during breaks to avoid interference with working hours. Overall, 1032 respondents were collected for 5 months (January–May 2022), with 560 female respondents (54.26%) and the rest male. Of this number, 640 were service employees (62.02%), and the rest were manufacturing companies. Furthermore, 220, 369 and 443 people worked less than 3 years (21.32%), between 3 and 10 years (35.75%) and more than 10 years (42.93%), respectively.

Measures

All research instruments were adopted from previous studies and assessed using a 5-point Likert scale of 1 = strongly disagree to 5 = strongly agree. Job crafting was measured using a 11-item questionnaire adopted from Petrou et al. (2012). In addition, four items measured the SJR dimension, for example, I seek feedback from others about my performance, and were valid with a loading factor 0.553–0.808 and reliable at $\alpha = 0.733$. The SJC dimension, for example, I ask for more responsibility, was measured using three valid items with a loading factor 0.772–0.864 and reliable ($\alpha = 0.797$). The RJD dimension, for example, I ensure my work is not too mentally demanding, was measured by four items, and three of the questionnaire were valid with a loading factor 0.769–0.828 and reliable ($\alpha = 0.789$).

Employee engagement was measured using a 17-item questionnaire adopted from Schaufeli and Bakker (2003) and Inam et al. (2021). Even though there were three dimensions in EE, this study combines them into a construct, for example, at work, I feel full of energy. Meanwhile, 14 items from 17 EE questions were valid with a loading factor 0.567–0.837 and reliable ($\alpha = 0.923$).

Increasing IRP and ERP were measured using a questionnaire adapted from Koopmans et al. (2012). IRP uses six question items, for example, I work to achieve the result of my work, and four were valid with a loading factor 0.577–0.856 and

reliable ($\alpha = 0.754$). Extra-role performance uses eight question items, for example, I take the initiative when a problem is solved, that were declared valid with a loading factor 0.654–0.860 and reliable ($\alpha = 0.888$).

Results and analysis

Preliminary analyses reporting the mean, standard deviation, bivariate correlation between variables and composite reliability are shown in Table 1. The mean of the studied variables is moderate (SJC and RJD) and high (SJR, EE, IRP and ERP). Seeking job challenge and RJD are high, while the other variables have a moderate standard deviation.

The reliability testing results with Cronbach's alpha and composite reliability of the variables studied were more significant than 0.70 and declared reliable (Hair et al., 2019). The bivariate correlation between the variables showed a significantly positive relationship. Meanwhile, a negative relationship exists between RJD and SJR. Increased SJR was negatively associated with RJD, which hinders employees' work. The three JC dimensions are positively related to EE, IRP and ERP. An independent sample *t*-test was conducted to analyse the differences in the three dimensions of JC, as presented in Table 2.

Table 2 shows that only SJC differs between manufacturing and service MSMEs. The other variables did not obtain any difference. In other words, different types of work lead to different challenges. Furthermore, Table 3 presents the results of the analysis of variance (ANOVA) test for testing the differences in the three JC dimensions based on tenure. Table 3 shows differences in the three JC dimensions in terms of employee tenure. The average SJR, SJC and RJD decreased following the significant difference.

TABLE 1: Mean, standard deviation, composite reliability and bivariate correlation.

Variables	SJR	SJC	RJD	EE	IRP	ERP
SJR	1.000	-	-	-	-	-
SJC	0.122**	1.000	-	-	-	-
RJD	-0.124**	0.369**	1.000	-	-	-
EE	0.323**	0.468**	0.232**	1.000	-	-
IRP	0.324**	0.402**	0.214**	0.663**	1.000	-
ERP	0.348**	0.352**	0.163**	0.767**	0.773**	1.000
Mean	4.272	3.062	2.787	4.003	3.988	4.065
Standard deviation	0.464	0.781	0.783	0.520	0.505	0.516
Composite reliability	0.809	0.900	0.889	0.961	0.876	0.944

SJR, Seeking job resources; SJC, Seeking job challenge; RJD, Reducing job demand; EE, Employee engagement; IRP, In-role performance; ERP, Extra-role performance.

** $p \leq 0.01$.

TABLE 2: Differences in job crafting by type of company.

Variables	The type of company	N	Mean	Standard deviation	Lavene's test	
					F	Significance
Seeking job resources	Manufactures	392	4.286	0.451	2.859	0.091
	Services	640	4.264	0.472		
Seeking job challenge	Manufactures	392	3.048	0.476	8.804	0.003
	Services	640	3.071	0.738		
Reducing job demands	Manufactures	392	2.793	0.833	0.517	0.472
	Services	640	2.783	0.752		

Structural equation modelling (SEM) with a two-step approach was used to test the model of the relationship between the dimensions of JC, EE and performance (Byrne, 2010). There were two models proposed in this study. The first was EE mediating the effect of three dimensions of JC on IRP and ERP based on the results of previous studies (Dubbelt et al., 2019; Hulshof et al., 2020; Lazazzara et al., 2020; Park et al., 2020; Shin et al., 2018; Van Wingerden et al., 2017; Vogel et al., 2016) presented in Table 4 and Figure 1.

The results of the first model test show that the three forms of JC have a significant positive effect on EE. This study also proved that EE increases IRP and ERP. Reducing inhibiting JDs has a negative and positive effect on SJR and SJC. The first model also proved that the three JC dimensions increase IRP and ERP. In other words, EE fully mediated the effect of the three JC dimensions on both performance dimensions.

The second model proposed the influence of EE on IRP and ERP mediated by the three JC dimensions based on previous studies (Bakker et al., 2020; Gray et al., 2020; Imran et al., 2020; Inam et al., 2021; Kim & Park, 2017; Robledo et al., 2019; Thao & Kang, 2018), which is presented in Table 5 and Figure 2.

The second relationship model shows that EE has a significant positive effect on both IRP and ERP. Furthermore, SJR, SJC and RJD did not affect ERP in this model. The impact of the three dimensions of JC on IRP was inconsistent. SJR, RJD and SJC have positive, negative and

zero effects on IRP. Extra-role performance had a significant positive effect on IRP. This second model also proved that EE improves all three JC dimensions. Consistent with the first model, RJD decreases SJR but increases SJC.

This study compared the fit indices categories of the two models to determine the best. Several criteria can be used to test the suitability of the model with SEM, namely the normed chi-square (χ^2/df), the comparative fit index (CFI), the normed fit index (NFI), Tucker and Lewis index (TLI), the adjusted goodness of fit index (AGFI), the standardised root mean square residual (SRMR), and the root mean square error of approximation (RMSEA). The criteria for model suitability are NFI > 0.90, CFI > 0.95, SRMR and RMSEA < 0.08 (Hu & Bentler, 1999). Meanwhile, the TLI criteria > 0.90 (Tucker & Lewis, 1973), the GFI criteria > 0.90, AGFI > 0.90, and the chi-square and $2/df$ criteria were expected to be small (Byrne, 2010), as presented in Table 6.

TABLE 3: Differences in job crafting by tenure.

Variables	Tenure	N	Mean	Standard deviation	ANOVA	
					F	Significance
Seeking job resources	< 3 years	220	4.382	0.475	10.491	0.000
	3–10 years	369	4.283	0.426		
	> 10 years	443	4.209	0.478		
Seeking job challenge	< 3 years	220	3.188	0.936	3.662	0.020
	3–10 years	369	3.033	0.632		
	> 10 years	443	3.024	0.803		
Reducing job demands	< 3 years	220	2.970	0.696	10.545	0.000
	3–10 years	369	2.796	0.759		
	> 10 years	443	2.667	0.826		

ANOVA, analysis of variance.

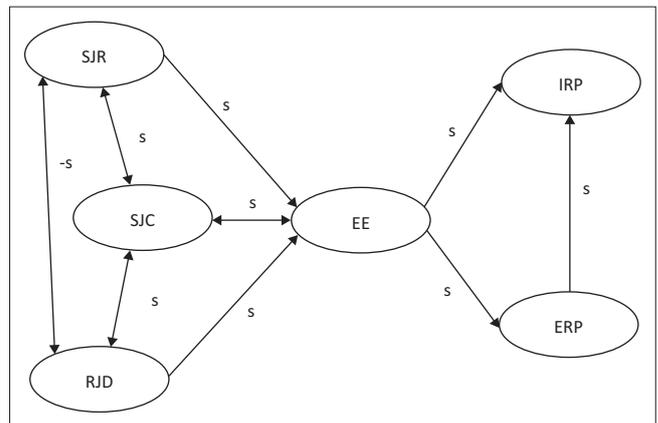
TABLE 4: Results of the first model test: Employee engagement mediates the effect of job crafting on performance.

Relationships	B	CR
SJR → EE	0.333**	7.848
SJC → EE	0.388**	8.499
RJD → EE	0.118**	2.549
EE → IRP	0.209**	3.962
EE → ERP	0.827**	36.209
ERP → IRP	0.692**	12.901
SJR ↔ SJC	0.206**	4.799
SJC ↔ RJD	0.517**	12.277
SJR ↔ RJD	-0.230**	-5.286

Note: Chi-square = 44.395; df = 6; GFI = 0.982; AGFI = 0.951; CFI = 0.983; NFI = 0.981; IFI = 0.983; TLI = 0.958; RMR = 0.006; RMSEA = 0.079.

CFI, comparative fit index; EE, employee engagement; ERP, extra-role performance; GFI, goodness of fit index; IFI, Incremental Fit Index; IRP, in-role performance; NFI, normed fit index; RJD, reducing inhibiting job demands; RMR, root mean square residual; RMSEA, root mean square error of approximation; SJC, seeking job challenges; SJR, seeking job resources; TLI, Tucker and Lewis index; AGFI, adjusted goodness of fit index.

***p* ≤ 0.05.



SJC, seeking job challenges; SJR, seeking job resources; RJD, reducing inhibiting job demands; EE, employee engagement; IRP, in-role performance; ERP, extra-role performance.

FIGURE 1: Results of the first model test: Employee engagement mediates the effect of job crafting on performance.

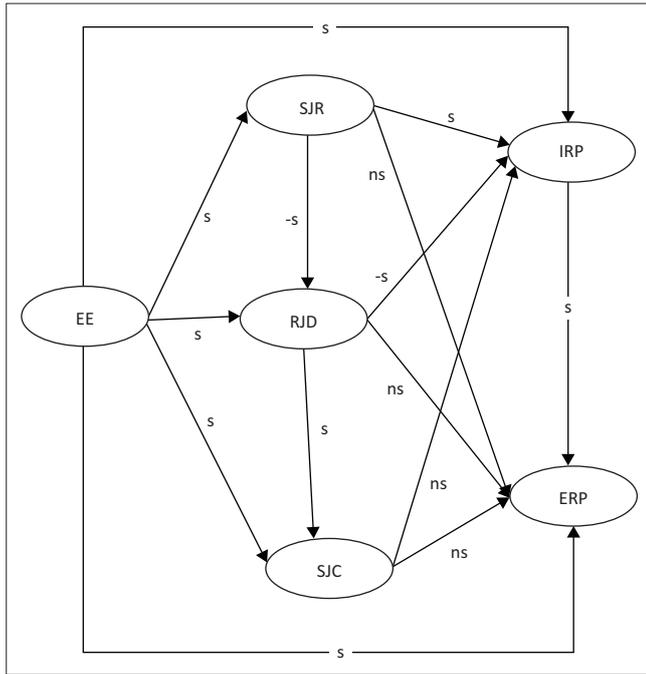
TABLE 5: Results of the first model test: Job crafting mediates the effect of work engagement on performance.

Relationships	B	CR
EE → SJR	0.460**	11.784
EE → SJC	0.424**	13.503
EE → RJD	0.250**	7.009
EE → IRP	0.823**	25.185
EE → ERP	0.153**	2.602
ERP → IRP	0.677**	12.699
RJD → SJR	-0.329**	-7.834
RJD → SJC	0.402**	11.809
SJR → IRP	0.145**	4.008
SJR → ERP	0.051	1.519
RJD → IRP	-0.083**	-2.318
RJD → ERP	0.005	0.152
SJC → IRP	0.061	1.598
SJC → ERP	-0.032	-0.894

Note: Chi-square = 19.894; df = 1; GFI = 0.994; AGFI = 0.867; CFI = 0.992; NFI = 0.991; IFI = 0.992; TLI = 0.877; RMR = 0.004; RMSEA = 0.135.

CFI, comparative fit index; EE, employee engagement; ERP, extra-role performance; GFI, goodness of fit index; IFI, Incremental Fit Index; IRP, in-role performance; NFI, normed fit index; RJD, reducing inhibiting job demands; RMR, root mean square residual; RMSEA, root mean square error of approximation; SJC, seeking job challenges; SJR, seeking resources; TLI, Tucker and Lewis index; AGFI, adjusted goodness of fit index.

***p* ≤ 0.05.



EE, employee engagement; SJR, seeking job resources; RJD, reducing inhibiting job demands; SJC, seeking job challenges; ERP, extra-role performance; IRP, in-role performance.

FIGURE 2: Results of the first model test: Job crafting mediates the effect of work engagement on performance.

TABLE 6: Comparison of the fit index of the two models.

Models	χ^2/df	GFI	AGFI	CFI	NFI	TLI	SRMR	RMSEA
Model 1	7.3992	0.982	0.951	0.983	0.981	0.958	0.006	0.079
Model 2	19.894	0.994	0.867	0.992	0.991	0.877	0.004	0.135

AGFI, adjusted goodness of fit index; CFI, comparative fit index; GFI, goodness of fit index; NFI, normed fit index; RMSEA, root mean square error of approximation; SRMR, standardised root mean square residual; TLI, Tucker and Lewis index.

Based on Table 5 and Figure 2., the first model fits with the data. In the case of employees of MSME in Indonesia, especially in Yogyakarta, JC can increase EE, which improves IRP and ERP performance.

Discussion

This study aims to examine the relationship model of the JC, EE and performance. Similar to previous studies, JC includes three dimensions, namely SJR, SJC and RJD. The three dimensions are significantly correlated with each other. The results indicate that the relationship between SJR and SJC and between SJC and RJD is positive, while SJR and RJD are negative. The search for job resources conflicts with the demands of the job. Furthermore, RJD is an aspect of work that requires continuous physical and mental abilities and can cause stress, while SJR helps achieve goals and increases motivation and personal development.

This study is in line with the research of Demerouti et al. (2015). The search for resources has an impact on the unwillingness of employees to eliminate JDs. Likewise, work demands cause employees to not look for resources that can improve the quality of their work. This study proves that JC is indeed the development of the JD-R model, where JDs and resources are JC avoidance and approach which brings negative and positive consequences as

suggested by Bakker and Demerouti (2017). This is in line with the COR theory, which supports individuals always looking for resources to minimise JDs (Hakanen et al., 2017; Shi et al., 2021).

This study partially supports the research findings of Rudolph et al. (2017) and Wrzesniewski et al. (2013), which state differences in JC between manufacturing and service companies. In addition, SJR differed between the two types of companies, while SJR and RJD had no difference. Manufacturing companies have a consistent work rhythm; hence, employees do not try to look for challenges, while those in service companies require a lot of creativity. This study supports the TWA, which states that work is an interaction between employees and their environment (Hulshof et al., 2020).

This study proves that junior employees prefer JC. There are differences in the three dimensions of JC in terms of tenure. This is consistent with previous studies (Bruning & Campion, 2019; Nagy et al., 2019). Younger employees prefer creativity and trying new things. Furthermore, they compare their ability with that of other companies to apply new standards in the workplace. Senior employees who already feel comfortable and established are reluctant to make changes. This finding supports TWA, which states that employees and their environment affect work (Hulshof et al., 2020). Additionally, young people tend to modify work to suit their expectations.

This study further strengthens previous studies that JC increases EE (Bakker & Orlemans, 2019; Gordon et al., 2015; Lazazzara et al., 2020; Meijerink et al., 2020; Metin et al., 2018; Vakola et al., 2021). Employees should proactively redesign jobs by looking for resources and challenges and reducing JDs to achieve a match in their work. In other words, JC increases EE and makes employees fit with their work. Employee engagement is related to human resource management systems, especially job descriptions and design. This is in line with SDT, where JC is a form of employee motivation to increase EP through EE (Maden-Eyiusta & Alten, 2021).

The first model strengthens previous studies that EE can improve EP, both IRP and ERP (Bakker & Xanthopoulou, 2013; Christian et al., 2011; Gorgievski et al., 2014; Hulshof et al., 2020; Metin et al., 2018; Van Wingerden et al., 2017). Employee engagement mediates the three JC dimensions' effect on IRP and ERP in this first model. This strengthens the results of previous studies such as Bavik et al. (2017), Dubbelt et al. (2019), Hulshof et al. (2020), Metin et al. (2018) and Park et al. (2020). In the first model, the effect of JC on performance is mediated by EE. Employees feel engaged in their work because of this concept, making them more productive and performing according to job descriptions. In line with SET, individuals who do not feel attached will perform poorly (Bakker & Xanthopoulou, 2013; Kim & Park, 2017).

In the second model, all JC dimensions' effect on ERP is insignificant. Job crafting does not affect ERP, which

contradicts previous studies, where JC can improve ERP (Bavik et al., 2017; Gordon et al., 2015; Khan et al., 2021). The effect of each JC dimension on IRP is inconsistent. Seeking job resources, RJD and SJC have positive, negative and zero impacts on IRP. This finding does not support previous studies such as Bakker and Van Woerkom (2018), Demerouti et al. (2015), Miglianico et al. (2020) and Zhang et al. (2020). However, this second model aligns with the first model, and EE positively affects IRP and ERP. Meanwhile, EE was completely related to IRP and ERP while encouraging creativity to achieve performance (Vakola et al., 2021).

Employee engagement is a job outcome that requires a long process to be achieved. One way to be conducted is by allowing employees to redesign their work. This innovative action requires creativity because work is an interaction between employees and their environment. Job redesign involves modifying jobs, tasks and behaviours. Employees can adjust existing jobs according to their needs, values and skills to generate internal motivation for work. Furthermore, their involvement in proactively expanding work boundaries can lead to feelings of psychological empowerment (Matsuo, 2019). Job crafting is an effective and very flexible way of giving autonomy to carry out their tasks efficiently. The ease of performing these tasks makes employees enthusiastic and highly dedicated. Besides improving EP, EE can also make employees feel at home in the company.

Conclusion

Job crafting is an opportunity for employees to be proactively involved in the company's activities. This opportunity has consistently motivated employees by increasing EE to improve performance, IRP and ERP. This study supports the JD-R model, SDT, TWA, COR theory and SET. However, it does not support TPB because JC is not a consequence of an individual's long career journey. Job crafting is more in demand by junior employees than seniors and has been shown to increase EE. This research implies that organisations should stimulate opportunities to engage in JC spontaneously. In addition, they should provide procedures to perform and conduct JC interventions to achieve alignment between employee and organisational goals. The initiative and autonomy of employees are encouraged to design or redesign their jobs to increase the level of psychological empowerment. Job crafting requires a change in culture from top-down to bottom-up.

Despite the various positive results that can be achieved, some weaknesses need to be understood. This study uses self-rating to improve the relationship between the variables studied. Future research can be conducted by using others' ratings. In addition, the cross-sectional analysis may attenuate the influence of the mediating variable. Therefore, future research needs to use time series data or experimental methods to achieve more complex results.

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Author's contributions

D.W.A. is the sole author of this article.

Ethical considerations

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