Research Article

The impact of transformational leadership on work engagement: The mediating role of job crafting

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ABSTRACT

The main purpose of this study is to examine the impact of transformational leadership on work engagement and the mediating effect of job crafting in the relationship between transformational leadership and work engagement among Saudi employees working in the private sector. An online structured questionnaire is used to gather data from 337 Saudi employees working in the private sector. The study findings reveal that transformational leadership is significantly related to work engagement. Job crafting significantly mediates the relationship between transformational leadership and work engagement. Theoretical and practical implications are discussed.

Keywords: transformational leadership; job crafting; work engagement; Saudi Arabia

1. Introduction

Modern organizations are undergoing significant and major transformations and the success of any organization depends on its visionary leadership due to its ability to convince employees to stay motivated and engaged at work[1]. The literature claims that traditional leadership style is ineffective in the complex environment of today[1]. Transactional leadership, which is one of the widely known leadership styles that does not require followers to collaborate with leaders in any way, becomes ineffective in today's workplace due to the disadvantages that might harm both companies and employees. For example, at the organizational level, transactional leadership creates an organizational environment that is routine and uncreative[2]. From the perspective of employees, transactional leadership lack of focus on building relationships, has difficulty finding rewards that motivate all employees, discourages creativity, and requires employees to adhere to rigid, restricted job processes[3]. Transactional leaders are also unwilling to discuss their own ideas or take into consideration others' ideas due to their dependence on this one-way leading style. This mind-set hinders transactional leaders from developing creativity, even when things aren't going according to plan[4].

To improve employee engagement and passion for their work, behavioural scientists are searching for an effective leadership style. Today's organizations require leaders who can inspire their employees to achieve organizational objectives by displaying specific behaviour like charisma, the ability to demonstrate significant influence, and a future vision. Leaders who display these qualities are transformational leaders[1].

Transformational leadership can be defined as providing followers with a feeling of independence and

accountability, which can boost engagement and performance[5]. Work engagement is characterized by vigor, dedication, and absorption at work and is defined as an active state of well-being. Both employees and organizations stand to benefit most from high levels of employee well-being in the workplace. Engaged workers are immersing themselves in their job roles, producing high-quality outputs, and they are active and open to new knowledge[6]. Work engagement is becoming more popular as an organizational management indicator in the HPM nowadays. According to a recent meta-analysis, low work engagement may lead to decreased well-being and work performance[7].

The idea of work that has meaning (or meaningfulness) has been widely conceptualized in the literature. When the employee feels there is a purpose of his/her work, he/she will feel the work is more meaningful. Individuals are be motivated to search for job that is exciting, personally fulfilling, and important. Some of the previous research on motivational concepts have highlighted how individuals are motivated based on needs. For instance, Maslow's Hierarchy of Needs states that when a person's fundamental needs for psychological support, physical safety, and social connection are met, he/she will focus on higher-order needs, which include advancing from "belonging" to "esteem" to "self-actualization". Finding a personal value in a person's job has been shown to be directly connected to meeting these higher-order needs[8]. Employees may also promote their own well-being which is one of the core characteristics of work engagement by intentionally modifying their jobs to better suit their unique needs, skills, and motivations at work[6]. This proactive behavior is called job crafting, which describes actions taken by employees to make changes in their tasks, work environment, or attitude to create jobs that are more meaningful for themselves[6]. Job crafting can foster employee well-being and engagement at work, benefits the company, and improves work output. Additionally, job crafting improves the connection between employees and others, keeps employees' favorable self-images, and makes their work more meaningful[9].

The purpose of this study is to examine the relationship between transformational leadership and work engagement and the mediating effect of job crafting on the relationship between transformational leadership and work engagement.

The objectives of this study will be met by answering the following research questions:
1) RQ1: Does transformational leadership impact work engagement?
2) RQ2: Does job crafting mediate the positive relationship between transformational leadership and work engagement?

2. Theory and hypotheses development

2.1. Transformational leadership and work engagement

Previous researchers have used social exchange theory to understand how and why transformational leadership can positively influence followers' work behavior and performance[10]. The transformational leadership style explains certain traits of leaders that influence their followers' behavior[11]. Avolio and Bass[12] identified the characteristics of transformational leaders and classified them into four categories/dimensions as follows: Idealized influence, intellectual stimulation, inspirational motivation, and individualized consideration to influence followers to behave above their self-interest and to perform more than expected. Idealized influence describes leaders' ability to create a sense of admiration, trust, and respect and act as role models to their followers. When leaders choose to act ethically rather than realistically, commit to their followers morally, and prioritize the needs of the organization over their own interests, they have the idealized impact[13]. Intellectual stimulation is a trait that arouses follower awareness, recognition, and ingenuity[12]. For the leader to stimulate an individual intellectual, he/she must encourage others to think creatively and think

about new ideas for accomplishing their tasks. In other words, a transformational leader encourages rational thought, increased intelligence, and problem-solving abilities[12]. Inspirational motivation describes transformational leaders' ability to inspire, motivate, and convince their future vision to their followers[13]. Individualized consideration describes the trait of transformational leaders who pay attention to individual followers' differences in terms of their strengths and weaknesses. The leaders coach their followers and provide them with continuous feedback to ensure that followers' capabilities are in line with the organization's mission and objectives[11,14]. In this study, we used all four dimensions of transformational leadership as developed by Bass[11].

Work engagement is a favorable, satisfied mental state that is associated with work and is characterized by vigor, dedication, and absorption. Moreover, work engagement does not center on a particular event, thing, or person's actions. Engagement comprises three main parts, as stated in the definition. The first one is vigor, which reflects high levels of mental fortitude and energy when engaged in work-related tasks, the willingness of a person to exert effort in work-related activities, and a high degree of tenacity in the face of difficult circumstances. As a result, energetic employees are highly driven by their work and are more willing to persevere in the face of obstacles or hurdles[15]. The second component of work engagement is dedication, which is defined by a strong participation, a high feeling of pride towards person's job, as well as a sense of passion, importance, and motivation. The third and last component of work engagement is absorption, which has been described as highly focused on person's job and having difficulties disconnecting from it[16]. When employees feel that their company supports their careers, they tend to be more ready to work and follow the principle of exchange by giving more and being more enthusiastic about their jobs. Therefore, employees are more likely to be personally committed in their jobs and show more dedication if they feel encouraged at work[17].

Another point of view that defined work engagement found that engagement has three distinct aspects: First, intellectual engagement, which refers to a commitment to doing one's job better. Second, affective engagement, or feeling good after doing one's job. Finally, social engagement, which involves engaging in conversations with others in order to enhance work-related improvements[18].

Many academics and practitioners recognize the significance of leadership development initiatives in improving engagement[19–23]. One of the first scholar who proposed the idea of personal transformational leadership is Kahn, who argues that transformational leadership is important in developing a dedicated, focused, and motivated workforce, which can encourage people to get engaged with their jobs[24]. Song, Kolb, Hee Lee, and Kyoung Kim[25] explored the mediating influence of work engagement between transformational leadership and organizational knowledge-creation. The findings demonstrated that work engagement acted as a mediator. Breevaart et al.[26] found that when leaders exhibit more transformational leadership traits, employees become more engaged in work. Ghadi, Mario and Caputi[8] found that the link between transformational leadership and work engagement in was mediated by employees' perceptions of meaning in their jobs.

A worker who receives excellent coaching and assistance from his/her manager is likely to view his/her work as more challenging, exciting, and satisfying, which in turn results in higher levels of productivity and work engagement[27]. Based on the above arguments, we hypothesize:
- H1: Transformational leadership positively impact work engagement.

2.2. Transformational leadership, job crafting, and work engagement

Job crafting was viewed as "changes that employees initiate in the level of job demands and job resources in order to make their own job more meaningful, engaging, and satisfying". The role of job crafting and

knowledge sharing[28]. Job crafting has been proposed as a new point of view, consisting of a bottom-up approach to achieving person-job fit that places a focus on employee engagement and unplanned change in job design, which is seen as a positive indicator of proactivity[29]. Job crafting was initially thought of as the physical and mental adjustments people make to the relational or task barriers to their jobs[30]. On this view, employees might use task crafting, relational crafting, and cognitive crafting techniques to strengthen their sense of meaning or identity at work. Task crafting refers to changes to the scope, quantity, or nature of work activities (e.g., adopting projects that are more suited to one's abilities). Relational crafting refers to changing the amount and quality of relationships at work (e.g., fewer unfavorable interactions). Cognitive crafting focus on when employees alter their cognitive representation of how they view and understand their jobs (for example, by considering their position and significance within the organization). This approach is known as role-based job crafting[31].

Tims and Bakker[32] defined job crafting based on the job demands-resources model as the adjustments that employees may make to find a balance between their job demands and job resources based on their individual needs and skills. This approach is known as resource-oriented job crafting. Job resources enable employees to manage job demands and accomplish work objectives whereas job demands are parts of a job that call for effort and energy, such as work overload[33].

Based on job demands resources model, the dimensions of job crafting are as follows: 1) Expanding structural job resources (i.e., modifying job autonomy or variety); 2) expanding social job resources (i.e., boosting advice or support from colleagues); 3) expanding challenging job demands (i.e., enhancing for increasing demands that demonstrate difficult goals and professional development); and 4) reducing hindering job demands (i.e., deliver fewer task demands if a worker feels overburdened)[29].

One way to achieve the expected organizational level through creativity and the appearance of organizational support is through a transformational leader, who is capable and able to influence and guide people or groups[34,35]. In organizations, transformational leadership is an important factor that can change the behavior of organizational champions in the context of better change. Better work behavior may be changed through transformational leadership, which can be seen through change job crafting by changing job resources or increasing challenges. Thus, the company may gain the advantages of its workforce by choosing, developing, and cultivating its people via transformational leadership which always helps employees to proactively drive the success of the organization[36].

Through their subordinates, transformational leaders think they can bring about change in organizational structures, processes, and procedures[37]. Employees may therefore feel at ease seeking out resources to start and carry out the change process and challenge the status quo. For example, companies often offer training and development opportunities, job enrichment programs, knowledge, and skills relevant to the workplace, information sharing, networking assistance, the ability to transfer decision-making authority, and other different resources to their employees, and transformational leaders are interested to seek these resources and are more likely to encourage their employees to seek them as well[37].

Transformational leaders expect excellent performance and creativity from their employees. Employees may seek advice and feedback from their managers and/or co-workers to perform at a high level. They need support from their leaders who can help them to be open and look for difficult situations so they can think creatively, develop, and put new ideas into practice[38]. Moreover, they can attempt new things, question the status quo, start a new project, or make improvements to current processes, and transformational leaders are capable to take their followers' previous initiatives and needs for growth into account through individualized consideration.

When employees believe that there is a better fit between their own abilities, skills, knowledge, and beliefs and the requirements, values, and culture of their organization, they will actively seek out challenges and be more engaged with their jobs[39].

Employees who work with transformational leaders try to expand their knowledge, strengthen their own skills, and look for additional structural resources to not only come up with but also put into new practice and innovative ideas. Transformational leaders engage with their followers on a personal level, encouraging them to create their own social resources. Therefore, it's expected that transformational leadership would encourage their employees to craft their own jobs[40]. According to Letona-Ibañez et al.[41], greater job and social resources as well as the pursuit of job challenges predict higher engagement. Furthermore, seeking challenges, reducing demands, and seeking resources affect work outcomes, such as work engagement[6].

Through motivation, transformational leaders persuade employees to go above and beyond the call of duty. According to Wu and Parker[42], employee motivational states act as a mediator between transformational leadership and employee behavioural outcomes. They specifically contend that through raising employees' motivation, leaders might affect their capacity for creativity and new work practices[40,42].

Afsar et al.[40] argue that transformational leadership may be able to promote employees' proactive behaviours that is influenced by job crafting. Followers of transformational leaders are expected to be adaptive, open to change, and driven to make a difference by engaging in creative behaviours because their leaders promote a compelling vision and offer reasonable reasons to challenge the status quo. Based on the above arguments, we hypothesize:

- H2: Transformational leadership positively impacts job crafting.
- H3: Job crafting positively impacts work engagement.
- H4: Job crafting mediates the relationship between transformational leadership and work engagement.

The above discussion is captured in **Figure 1**.
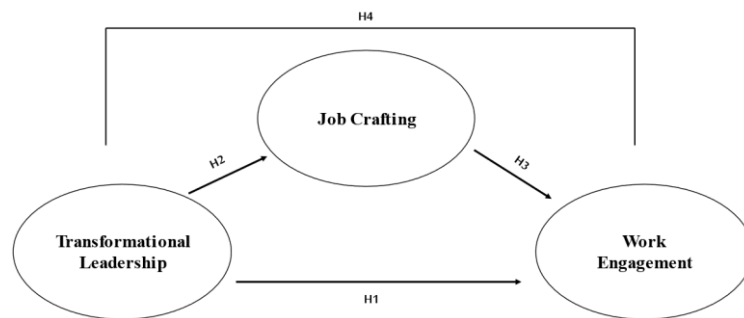
Figure 1. Hypothesized model.

3. Methodology

3.1. Sample and data collection

A native Arabic speaker from Saudi Arabia used forward translation to convert the questionnaire from the English language into the Arabic language. To weed out any spelling or grammar issues, one more bilingual researcher was asked to do back translation without having access to the original language version[43]. A pilot study has been conducted with 53 participants. The pilot study was excluded from the research sample. A convenience sample method was used. Participants in this study were Saudi employees who worked in private-sector companies. Data were collected using a structured online survey, Google form was used to distribute the survey.

A total of 337 responses were gathered in less than two weeks. **Table 1** shows the respondents' demographic and illustrates the 337 responses generated, 65.6% of them were females, while the rest of them 34.4% were males. Most of the participants were aged between 25 to 34 years old. In terms of educational level, 49.3% of the respondents had a bachelor's degree, 22.3% had a diploma degree, and 21.4% had a master's degree. Respondents were from different industries in the private sector as shown in **Table 1**.

Table 1. Demographics of research sample ($N = 337$).

Gender	Male	Female				
	34.4%	65.6%				
Age	< 25	25–34	35–44	45–54	> 54	
	3.6%	35.6%	35.6%	23.4%	1.8%	
Education level	High school	Diploma	Bachelors	Masters	PhD	
	3.9%	22.3%	49.3%	21.4%	3.3%	
Years of experience	> 3	3–6	7–15	> 15		
	22.8%	34.4%	35.0%	7.7%		
Industry type	Healthcare	IT	Manufacturing	Tourism	Law	Financial services
	15.4%	13.1%	12.8%	10.1%	9.5%	8.9%
	Education	Engineering	Marketing	Art	Other	
	8.6%	8.0%	6.2%	4.7%	2.7%	

3.2. Measures

Three constructs were used to examine our hypotheses which are transformational leadership, job crafting, and work engagement.

Twenty items scale developed by Podsakoff et al.[44] was used to examine transformational leadership. The scale has 20 items, 5 items to assess each dimension of transformational leadership; idealized influence, inspirational motivation, intellectual stimulation, and individual consideration. For this study, 3 items have been used based on their interdependence and relevance to the study.

Tims et al.[45] 15-item scale was used to measure job crafting behaviour. The scale has three dimensions of job crafting; increasing structural job resources, increasing social resources, and increasing challenge job demands. For this study, 3 items for each behaviour have been used based on their interdependence and relevance to the study.

ISA engagement scale by Soan et al.[46] was used to measure work engagement. The scale contains 12 items, 3 items for each engagement dimension; intellectual engagement, social engagement, and affective engagement. Five-point Likert scale ranging from (1 strongly disagree to 5 strongly agree) was used to measure the three constructs. Please check Appendix.

4. Measurement model result

4.1. Confirmatory factor analysis

The measurement model was evaluated using AMOS v28.0, a covariance-based SEM technique that uses the maximum likelihood approach. The psychometric properties of the three latent constructs were examined together in one confirmatory factor analysis. The results showed that the model fit the data very well. No issues were found in standard errors or residuals as shown in **Table 2**, we have obtained a good model fit[47].

Table 2. Model fit.

Chi-square	Degrees of freedom	CMIN/DF	P value	CFI	TLI	RMSEA	RMR	AGFI	GFI	P close
22.849	11	2.077	0.019	0.972	0.946	0.057	0.033	0.952	0.981	0.330

4.2. Convergent and discriminant validity

We have assessed the convergent validity using the recommended thresholds by Bagozzi and Yi[48]. As shown in **Table 3**, The measurement model in this research has achieved satisfactory reliability, convergent and discriminant validity[47,49,50].

Table 3. Reliability, convergent validity, and discriminant validity.

	CR	AVE	MSV	Max R(H)	1	2	3
Work engagement	0.715	0.545	0.181	0.622	0.667	-	-
Transformational leadership	0.794	0.531	0.181	0.698	0.425	0.656	-
Job crafting	0.788	0.526	0.181	0.695	0.383	0.425	0.725

Note: CR: Composite reliability; AVE: Average variance extracted; MSV: Maximize shared variance; Max R(H): Maximal reliability.

5. Findings

5.1. Descriptive statistics

The means, standard deviations, reliabilities, and correlation between the study variables are shown in **Table 4**, and all variables have acceptable reliabilities[49].

Table 4. Means, standard deviations, Cronbach's alphas, and intercorrelations among study variables.

	Mean	SD	1	2	3
Transformational leadership	3.003	0.5906	**0.816**	-	-
Job crafting	2.921	0.5329	0.542**	**0.729**	-
Work engagement	2.747	0.5641	0.558**	0.509**	**0.706**

Note(s): The value of Cronbach's alpha is shown in italics diagonally in the matrix. * Correlation is significant at the 0.05 level (2-digit). ** Correlation is significant at the 0.01 level (2-digit).
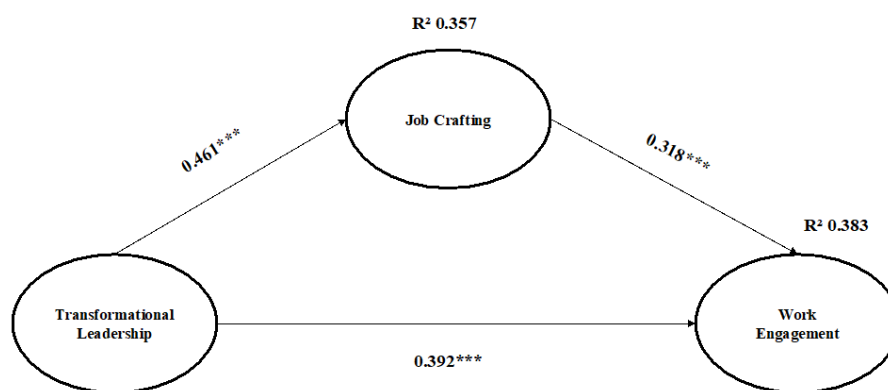
Figure 2. Hypothesized model results (***$p < 0.001$).

5.2. Direct effects results

AMOS 0.28 software was used to conduct the structural equation modelling. **Figure 2** shows that all H1, H2, H3 are supported as there were direct significant effects within the structural equation model and an indirect relationship between leadership and work engagement via job crafting. Transformational leadership has a positive impact on work engagement ($\beta = 0.392$***, $p < 0.05$). Transformational leadership has a positive

impact on job crafting ($\beta = 0.461$***, $p < 0.05$). Job crafting has a positive impact on work engagement ($\beta = 0.318$***, $p < 0.05$).

5.3. Indirect effect results

Bootstrapping method suggested by Hayes[51] was used. We performed 2000 bootstrapping to avoid non-normal distributions. The results are significant at 95% CI. The conditional indirect effect of transformational leadership to work engagement s via job crafting is $\beta = 0.154$, $p < 0.005$ (H4). As shown in **Table 5**, job crafting partially mediates the positive relationship between transformational leadership to work engagement.

Table 5. Indirect effects of transformational leadership on work engagement.

	Estimate	*P* value	MT
Job crafting	0.154	$p < 0.005$	P

Note: $p < 0.001$; MT = Mediation type; P = Partial mediation; F = Full mediation; N = None mediation.

6. Discussion

The main goal of the current quantitative study is to examine the effect of transformational leadership and job crafting on work engagement among Saudi employees, while considering the mediation role of job crafting in the relationship. The findings indicate that employees who have transformational leaders are more likely to be engaged at work. The findings of this study, which involved Saudi workers in the private sector, are consistent with those of earlier research conducted in other studies[8,19,27,52,53].

This study also indicates that transformational leader is able to increase social resources, structural resources, and challenging job demands, which indicate a positive effect on job crafting behaviour. Employees who have transformational leaders may feel a greater capacity of carrying out their duties and feel more certain that they are making a positive contribution to society. The current study supports the positive relationship between job crafting and transformational leadership and supports that job crafting behaviour may be influenced by transformational leaders. This finding is consistent with those in the earlier literature by Mahmud[36] and Afsar et al.[40].

A further finding of this study is that job crafting has a positive direct influence on work engagement as well as mediating the positive relationship between transformational leadership and work engagement. The direct positive relationship may be explained by considering the fact that job crafting enables workers to engage in a process of assessment on their work setting through which engagement-related elements like enthusiasm, inspiration, or challenge can be strengthened[41].

The significant positive relationship between transformational leadership and job crafting suggests that how employees view and interact with their leaders affects how they handle problems at work. By enhancing their feeling of belonging, transformational leadership empowers employees to take initiative, seek out relationships with others, and provide feedback to improve their everyday working environment. By giving employees the freedom and space to grow and to make their work more interesting, transformational leaders may also foster an active learning environment and make the employee more engaged with their work. This finding is in line with the previous literature by Afsar et al.[40].

7. Practical implication, limitation, and future research

According to the study's findings, transformational leadership positively and significantly affects employee engagement at work. As a result, organizations must foster an atmosphere that encourages employee's engagement and provide managers with training in transformational leadership traits. To do this,

managers can get training on how to implement participative management, considering each employee unique needs, inspire a compelling vision by outlining to the employees the importance of their existence at work, and motivate them to try out new ideas and practices. In such a situation, leaders might act more transformative by providing a compelling vision to inspire employees to craft their own work. Moreover, companies must be aware and open to the jab crafting concept and the benefits of it and forget about the old way of managing employees by providing them specific and detailed job descriptions. Job crafting can help employees perceive their work as more meaningful, and that can be done by allowing the employees make changes in their jobs and work environments such as modifying the way they perform their tasks, determining their social networks, or increasing their job demands in the way that bring challenging and excitement to their work. In other word, encouraging and empowering employees by giving them the autonomy to perform their work in a way that will be interesting and exciting to them, all these will result in higher levels of engagement.

For the limitation and future research, the current study has some limitations. First, it is not possible to infer causality due to the cross-sectional research design, thus future research must conduct a longitudinal research design to examine the causal effects of transformational leadership and job crafting on work engagement. Second, all the outcomes in our study have been examined using self-reported measures; hence common method bias is another limitation of the current study. Third, his study focused on work engagement as an outcome, there may be other outcomes that are worth investigating such as innovative work behaviour, turnover intention, job commitment and job satisfaction.

8. Conclusion

The current study highlights the effect of transformational leadership and job crafting on work engagement among Saudi employees, while considering the mediation role of job crafting in the relationship. The findings support that transformational leadership and job crafting positively impact work engagement. Moreover, job crafting mediates the relationship between transformational leadership and work engagement.

Author contributions

Methodology, SD; software, SD; validation, SD; formal analysis, MA; investigation, BB; data curation, BB; writing—original draft preparation, BB; writing—review and editing, BB and SD; supervision, SD. All authors have read and agreed to the published version of the manuscript.

Conflict of interest

The authors declare no conflict of interest.

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Appendix

Tabel A1. Measures.

Construct	Items	Rating scale
Transformational leadership	(1) Idealized influence (3 Items): My leader specifies the importance of a strong sense of purpose; My leader convinces me to go beyond self-interest for the good of the group; My leader acts in ways that build others' respect for me. (2) Inspirational motivation (3 Items): My leader talks optimistically about future; My leader talks enthusiastically about what needs to be established; My leader articulates a compelling vision of future. (3) Intellectual stimulation (3 Items): My leader gets others to look at problems from many different angles; My leader displays a sense of power and confidence; My leader suggests new ways of looking at how to complete assignments. (4) Individual consideration (3 Items): My leader spends time coaching, teaching and mentoring his/her followers; My leader considers an individual as having different needs, abilities and aspirations from others; My leader helps others to develop their strengths.	Five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree)
Job crafting	(1) Increasing structural resource (3 Items): I try to develop my capabilities; I try to learn new things at work; I make sure that I use my capacities to the fullest. (2) Increasing social resources (3 Items): I ask my supervisor to coach me; I ask my supervisor whether he/she is satisfied from my work; I ask colleagues for advice. (3) Increasing challenge job demands (3 Items): If there are new developments, I am one of the first to learn about them and try them out; When there is not much to do at work, I see it as a chance to start new projects; I regularly take on extra tasks even though I do not receive extra salary for them.	Five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree
Work engagement	(1) Intellectual engagement (2 Items): I focus hard on my work; pay a lot of attention to my work. (2) Social engagement (3 Items): I share the same work values as my colleagues; I share the same work goals as my colleagues; I share the same work attitudes as my colleagues. (3) Affective engagement (3 Items): I feel positive about my work; I feel energetic in my work; I am enthusiastic in my work.	Five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree