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The Effects of Mindfulness as Personal Resources on Job Burnout under Job Demands-Resources Model

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Abstract: Mindfulness is a cognitive state of alertness and proactive awareness, which can promote employees' development and outcomes, has widespread concern in organizational behaviorresearch field. The research combines employees' personal factor and external job characteristics and focus on the effects of mindfulness on job burnout under job demands-resources model. Through the survey of 2667 employees, using regression analysis and SEM, this research finds that: job demandshave significant and positive effect on burnout, however job resources have significant and negative effect;mindfulness have significant and negative effect on burnout; mindfulness have a moderated effect on the relationship between job resources and burnout.Most of researches focus on its verifying not extending, with little attention to individual difference, especially personal resources. This research proves the improvement of mindfulness can make people evaluate and considerate existing job resources in a more positive way and raise their awareness of alternative resourcesto prevent from job burnout.

Key words: Mindfulness · Job demands · Job resources · Job Burnout · Personal Resources

INTRODUCTION

Currently, the research of job burnout has became a hot issue in the field of organization behavior and enterprise managers are working on reducing employee job burnout among workplace to avoid passive impact of business operations and developments. Many researchers have used the job demands-resources model (JD-R model) [1] as a theoretical framework to examine how different job characteristics influence job burnout or negative outcomes. However, studies on the JD-R model have been restricted to work characteristics and, as a result, the role of employees' personal resources, which can be important determinants of their adaptation to work environments [2, 3], has been neglected.

Job resources refer to all physical, psychological, social andorganizational aspects of the job [4] that facilitate the achievement of work goals and stimulate personal growth, learning and development. However, employees are also able to build resources within themselves, such as optimism, self-efficacy and confidence [5]. These personal resources have in common that they refer to aspects of the self that are connected to resiliency and individuals' potential to adapt to their environment [6]. In other words, it is proposed that personal resources may function either as moderators or as mediators in the relationship between environmental factors and organizational outcomes, or they may even determine the way people comprehend the environment, formulate it and react to it [7]. It can be argued that job and personal resources are reciprocal, since individuals, through learning experiences, can form stronger positive evaluations about themselves and in turn, they comprehend or create more resourceful work environments. So, more and more researchers start focusing on the role of personal resources in JD-R model and its impacts on job burnout. And it is important and essential to integrate personal resources into JD-R model.

An important new stream of organizational research has emerged in recent years that draw on the notion of mindfulness. Langer (1989) specifies the concept of mindfulness as a state of active awareness characterized by the continual creation and refinement of categories, openness to new information and willingness to view contexts from multiple perspectives [8]. Specifically, a mindful person is one who has heightened awareness of the present reality and gives focal attention to living the moment. As indicated in the opening comments, mindfulness is characterized by an open, receptive and nonjudgmental orientation to the present and is viewed

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not as the achievement of any particular state, but as intentional awareness of what is, being aware of awareness [9].

The researchers provided recent reviews of mindfulness and allude to the potential value of examining mindfulness and its contributions to work-related outcomes, such as resiliency and stress reduction [10]. One-study findings reinforce previous research that mindfulnessis beneficial to employee stress reduction. Those studies suggest that employees with high levels of mindfulness have greater mastery that helps them to deal more effectively with demanding conditions and in turn prevent them from negative outcomes [11]. The dynamic, unpredictable work environments that employees face are widely associated with greater pressure and stress. For employees who are working in stressful situations, this greater mindfulness enables them to view situations "for what they really are" without rumination or worry of past or future negative events. Hence, the beneficial effects of mindfulness do appear to apply to employees and workplace issues.

Research on mindfulness suggests it is as an inner personal resource that supports beneficial psychological functioning, mindfulness decreases automatic mental processes where past cognitive habits, thinking patterns and experiences constrain thinking [9, 12], so may change employees' cognition of job demands or resources.In a similar vein, mindfulness can be considered as a personal resource. A key element of mindfulness is acceptance of the present, which makes employees more resilient to a changing work environment by helping them accept their current level of resources and raise their awareness of alternative resources [13].

But mindfulness has not yet beenexplored as an antecedent for employeesburnout and considered in JD-R model as a kind of personal resource, which is measured by a wide variety of dysfunctional outcomes resulting from the pressure-packed environment that today's organization face. If we apply this perspective of reciprocity to the JD-R model, we may expect thatemployees with high level of mindfulnesswill focus more on job resources than on job demands and as a result they will experience lower levels of job burnout.

So, in this study we specifically test the role that mindfulness may play in JD-R model and the impact on job burnout in workplace.Crucial to this meaning of mindfulness is the internal awareness of the employee's perception and attention to the current situation [14, 15], may revalue and utilize job demands or resources.

We argue that mindfulness is beneficial inwork contexts because it provides employees with a personal resource that makes them more resilient to the loss of job resources and more aware of alternative job resources in their changed work environment.On the basis of the previous theoretical analysis, we hypothesized:

Hypothesis 1a: Job demands have positive predicted ability to levels of burnout for employees, which meanhigher levels of job demands were associated with higher levels of job burnout.

Hypothesis 1b: Job resources have negative predicted ability to levels of burnout for employees, which mean higher levels of job resources were associated with lower levels of job burnout.

Hypothesis 2: Mindfulness have negative predicted ability to levels of burnout for employees, which means higher levels of mindfulness were associated with lower levels of job burnout.

Hypothesis 3: Mindfulness has a moderated effect on the relationship between job resources and burnout.

Finally, we recognized that additional hypotheses might be formed. However, we exclusively focused on the theoretically most important effects that derive when integrating mindfulness as the personal resource in the JD-R model.

MATERIALS and METHODS

Participants and Measures: The present study was conducted among employees of an electrical communication company in China. A total of 2667 employees completed the questionnaire (96.3% response rate), 1501 participants were men and 1166 participants were women. Their mean age was 38.92 years (SD=5.37) and their mean organizational tenure was 13.27 years (SD=9.16).

Job Burnout: Job burnout was measured with the Maslach Burnout Inventory(MBI) [16]. The MBI assesses burnout from the mean of the three component subscales: emotional exhaustion (5items), depersonalization(4items) and diminished personal accomplishment (6 items). Responses were made on a Likertscale from 1 (strongly disagree) to 7 (strongly agree). Higher score indicates greater level of each dimension of burnout. In this study, this scale's Cronbach's alpha coefficients were 0.78, GFI= 0.94,CFI=0.96,RMESA=0.07.

Mindfulness: Mindfulness was measured with the Langer Mindfulness Scale (LMS) [17]. The LMS assesses mindfulness from the mean of the three component subscales:novelty seeking (5 items), novelty producing (5 items) and engagement (4 items). Responses were made on aLikert scale from 1 (strongly disagree) to 7 (stronglyagree). Higher score indicates greater level of each dimension of mindfulness. In this study, this scale's Cronbach's alpha coefficients were 0.88, GFI=0.94,CFI=0.92,RMESA= 0.08.

Job Demands and Job Resources: According to the JD-R model, the characteristics of work environments can be classified in two general categories, job demands and job resources, which incorporate different specific demands and resources, depending on the context under study. The choice of the specific three job demands (workload, work conflict, relationship requirements) and three job resources (social support, job autonomy, development opportunity) was based on two criteria. First, we included those characteristics that are significant for the majority of jobs. Secondly, after discussions with representatives of the human relations department of the company, we traced other work characteristics that are crucial for the particular occupational setting.

Workload was assessed with a 6-item scale and work conflict was assessed with a 3-item scale derivedfrom the job content questionnaire (JCQ) developed by Karasek *et al*. [18]. Relationship requirement was assessed with a 4-item scale derivedfromthe Questionnaire on the Experience and Evaluation of Work (VBBA) developed by Veldhoven *et al*. [19]. In this study, the job demands scale's Cronbach's alpha coefficients were 0.78, GFI=0.95,CFI=0.93,RMESA=0.08.

Social support was assessed with a 4-item scale and job autonomy was assessed with a 3-item scale derived from the job content questionnaire (JCQ) developed by Karasek *et al*. [18]. Development opportunity was assessed with a 3-item scale of Bakker *et al*. [20]. In this study, the job resources scale'sCronbach's alpha coefficients were 0.83, GFI=0.97,CFI=0.97,RMESA=0.07.

RESULTS

Common Method Bias: All variables were measured by self-report questionnaires at once, so this study adopted Harman's single factor test to examine common method bias. The exploratory factor analysis extracted 10 factors and the biggest variance of factors was 21.5%. The result showed there was no common method bias in this study.

Descriptive Statistics and Correlations: This study included several multidimensional constructs: jobdemands and resources, mindfulness and job burnout. To create composite scores for these broad constructs, subscale scores were standardized before calculating their mean. This addressed problems where different measurement scales were used, as was the case for work resources, but also prevented subscales with greater variance from having higher weightings in the overall scale score.

Means, standard deviations and correlations between the variables, as well as the internal consistencies of the scales are presented in Table 1. The level of mindfulness and three dimensions (novelty seeking, novelty producing and engagement) were all significant negative correlate with the level of burnout and three dimensions (emotional exhaustion, depersonalization and diminished personal accomplishment).

Regression Analysis: Hierarchical regression analyses indicated that the job demands was a positive predictor of the level of job burnout (β=0.31,t=16.10,p<0.001)beyond demographic variables (age, gender, marital status,education levels, position),)but the job resources was a negative predictor (β=-0.52,t=-30.81,p < 0.001).

Modeling Test: In order to test the moderation effect of Hypothesis 3, we conducted moderated structural equation modeling (MSEM) analysisto the whole JD-R model this time[21]. To control for the possibility that biographical differences in the predictors and criterion measures might lead to spurious relationships, the following biographical background factors were assessed additionally for each respondent: age (in years), gender (1=female, 2=male) and organizational tenure (in years). Because of sample size constraints, path analysis with maximum likelihood estimation was undertaken using Amos (version 21) to examine the model.

We tested a model that included three exogenous (job resources, mindfulness and their interaction) and two endogenous latent factors(job demands and job burnout). Each latent exogenous factor had only one indicator, namely its standardized factor score, obtained after respective factor analyses. Specifically, the indicator of job resources factor was the factor score of the entire job resources scales, which was the combination of the social support,job autonomy and development opportunity scales. And the indicator of mindfulness factor was the score of LMS and the indicator of the

Table 1: *Means, standard deviations and correlations among measures (N=2667)*

Variables	*M*	*SD*	1	2	3	4	5	6	7	8	9
1	2.92	0.87	1.00								
2	2.77	0.98	0.66**	1.00							
3	2.55	0.75	0.25**	0.38**	1.00						
4	2.73	0.67	0.81**	0.85**	0.71**	1.00					
5	4.70	0.95	-0.24**	-0.25**	-0.38**	-0.38**	1.00				
6	4.49	0.91	-0.26**	-0.25**	-0.25**	-0.33**	0.38**	1.00			
7	5.10	0.91	-0.24**	-0.25**	-0.35**	-0.37**	0.72**	0.28**	1.00		
8	4.78	0.75	-0.30**	-0.30**	-0.41**	-0.45**	0.90**	0.64**	0.86**	1.00	
9	3.70	0.68	0.41**	0.34**	-0.01	0.31**	0.06**	-0.07**	0.10**	0.05*	1.00
10	4.16	0.63	-0.41**	-0.51**	-0.32**	-0.52**	0.26**	0.16**	0.30**	0.30**	-0.37**

1= Emotional exhaustion; 2 =Depersonalization; 3 =Diminished personal accomplishment; 4 = Job burnout; 5 = Novelty producing; 6 = Engagement; 7 = Novelty seeking; 8 = Mindfulness; 9 = Job demands; 10 = Job resources

M: mean; SD: standard deviation

*p<0.05, **p<0.01, ***p<0.001

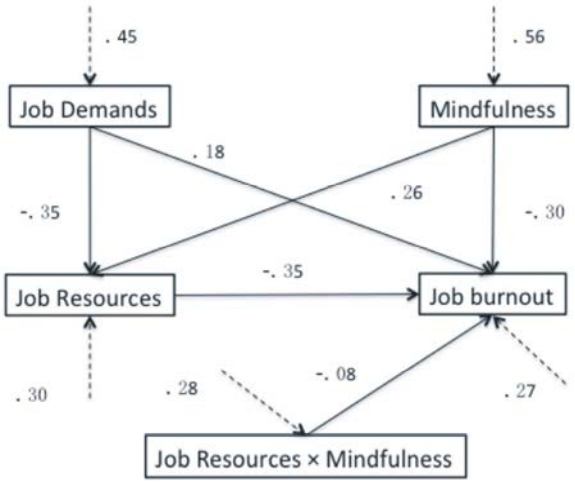

Fig 1: *Final Model with the Relationships between Mindfulness and Job Burnout under JD-R Model. All structural pathways are significant at the p<.01 level.*

interaction factor was the multiplicative result of the factor score of the job resources and the factor score of the mindfulness.

The model included direct paths from the three exogenous factors to the endogenous factor. The latent job resources and mindfulness factors were allowed to correlate, whereas correlations between job resources, mindfulness and their interaction term were expected to be zero. Finally, the paths from the exogenous variables to their indicators were fixed using the square roots of the scale reliabilities, while the error variances of each indicator were set equal to the product of their variances and one minus their reliabilities [22]. For the calculation of the reliability score of the interaction term, we refer to Cortina et al.. A significant interaction effect exists if the coefficient of the path from the latent job resources× mindfulnessinteraction factor to job burnout is statistically significant. Results of MSEM analysis showed that the model fits well to the data (CMIN=34.029, df=4, GFI=0.995, CFI=0.985,TLI=0.962, RMSEA=0.053),and the path coefficient from the interaction term to exhaustion is significant (??p<0.001), thus accepting Hypothesis3. Mindfulness moderated the relationship between job resources and job burnout. It is important to note that the results werenot significant when we tested the interaction effects between mindfulness and job demands.

DISCUSSION

The JD-R model predicts that whereas demands contribute to burnout, resources should reduce burnout while also contributing to engagement. These predictions have been supported by numerous studies across different cultures and occupational groups [20, 23]. As indicated, the central aim of our study was to expand the JD-R model by examining how mindfulness as personal resources operates in relation to the model's processes. This study, spread over a wide range of employees and organizations, consistently found a strong negative relationship between their mindfulness and job burnout.

According to a widespread notion, personal resources are components of the self that are generally linked to resiliency and refer to individuals' sense of their ability to control and impact on their environment successfully [6]. Past research has concentrated on personal resources like confidence and personal initiative. One such positive psychological resource that has received very little attention in organizational behaviorfield research is the affect of mindfulness [13, 14].

Mindfulness, however, offers an additional resource over and above these established personal resources. Because mindfulness involves an open awareness toward experiences in the present rather than the past or the future, mindful employees may become aware of resources they might not have noticed otherwise [24]. Moreover, because mindful individuals are able to observe their experiences without judging, reflecting, evaluating, or analyzing those, they become less vulnerable to the negative feelings associated with resource loss. So, the nonjudgmental, open awareness of present moment reality and experiences associated with mindfulness enhances the awareness of job resources (physical and social work environment) and personal resources (thoughts, feelings and bodily sensations) thus reducing job burnout conditions.

The findings of this study attest to the positive impact that mindfulness seems to have in combating the job burnout condition affecting today's employees and organizations. Mindfulness not only had direct effects on the job burnout, but further analysis found that it served as a moderator between job resources and job burnout [25].

Building on the focal article by Hyland, Lee and Mills, we propose JD-R model and the conservation of resource (COR) theory [2] as the framework that may explain why mindfulness contributes to prevent from job burnout in an organizational context [26]. According to COR theory, people strive to build, protect and retain the personal characteristics, conditions and energies that enable them to cope with job demands. This study combines COR theory [6] with the buffer hypothesis of the JD-R model [20], because it recognizes the potential moderating role of personal (and not only job) resources in the model's health impairment process.

According to COR theory, people strive to actively maintain their level of resources because a loss of resources may bring about feelings of stress and burnout. However, because change is inherent to modern organizations, alterations in the availability of resources to employees are inevitable. Changes in job resources may take place in the organization (e.g., income), in interpersonal and social relations (e.g., leader and coworker support) and in the design and organization of work (e.g., autonomy). Instead of passively undergoing resource loss caused by organizational change, employees will actively try to maintain their resources by crafting their job tasks, their relations and the meaning they attach to their work [27]. Personal resources can be expected to play a role in how effective people are in crafting their job resources.

This study shows some potential limitations that we hope future researches overcome. First, the cross-sectional nature prevents conclusions about causal and reciprocal relationships among the variables and it limits the interpretation of indirect relationships. To fully understand the direction of the effects and the causal relationships between our variables, longitudinal analyses are necessary.Ideally, a three-wave design should be used in future studies to investigate the causal and moderate relationships between job resources, mindfulness and job burnout. This could provide a better understanding of the dynamic nature of these concepts and could further explore the effect that mindfulness has in stimulating employee wellbeing.A second limitation concerns potential common method bias due to the exclusive use of self-report measures. We attempted to minimize this problem by that we only used carefully constructed and validated measures and we attempted to reduce participants' evaluation apprehension by emphasizing there were no right or wrong answers. Still, it is important to also look at objective measures, most notably for job resources.

Some practical implication could be proposed from findings in the current study. The study makes a significant contribution to the theoretical development of the JD-R model because it confirms its central hypotheses, but most importantly expands the model, by specifying, the various functions of mindfulness as personal resources within its framework. Given that burnout is widely recognized as a big problem for employees, this finding has potential personal and economic benefits for start-ups and innovative businesses in a receding economy needing job creation. Career counselors and HR programs may benefit from this insight by simultaneously increasing job resources and mindfulness to decrease employee job burnout.

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