Impact of Job Demands and Resources on Idea Generation: A COR Theory Perspective

Ashish Saini, Santosh Rangnekar

Abstract

Grounded in the Conservation of Resources (COR) theory, this investigation delves into the interrelationship among job demands, job resources, and employee creativity. In particular, the paper examines the effect of challenging job demands on idea generation while considering the mediating role of structural job resources. Using a cross-sectional approach, we obtained data from 190 participants in India's manufacturing and service sectors through self-administered questionnaires distributed via email and WhatsApp. Through structural equation modelling and Hayes' PROCESS macro, the study confirmed a positive relationship between challenging job demands and structural job resources, challenging job demands and idea generation, and structural job resources and idea generation. It is worth noting that structural job resources were found to partially mediate the positive connection between challenging job demands and idea generation. Current investigation contributes to the advancement of the COR theory, offering valuable insights into the intricate factors that influence idea generation. Beyond the theoretical contributions, this research has practical implications for performance management systems and highlights opportunities for further exploration in understanding the complex dynamics of job demands, resources, and creativity.

Keywords: challenging job demands, creativity, idea generation, innovation, job crafting, structural job resources

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Ashish Saini, Department of Management Studies, Indian Institute of Technology, Roorkee, Uttarakhand, India, e-mail: ashish@ms.iitr.ac.in ORCID: 0000-0003-1138-9050
Santosh Rangnekar, Department of Management Studies, Indian Institute of Technology, Roorkee, Uttarakhand, India, e-mail: santosh.rangnekar@ms.iitr.ac.in

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1. Introduction

Adaptability and innovation in contemporary workplaces are essential for organisational competitiveness and survival (Anderson et al., 2014). The development of new products, services, methodologies, and procedures is fuelled by creativity, a messy process involving progress and setbacks (Vinokurova & Kapoor, 2020). Organisations recognise the significance of innovation and invest significant efforts and resources in fostering a creative environment despite the challenges and failures that may arise at personal and organisational levels (Kwon & Kim, 2020). Therefore, examining the dynamic association between job resources, job demands, and their effect on innovation is essential for individuals looking to comprehend the factors that either support or impede organisational creativity (Anning-Dorson et al., 2017). Tims and Bakker (2010) introduced job crafting within the JD-R Model. However, the concept of job crafting by Wrzesniewski and Dutton (2001) initially enables employees to proactively reshape their work environment to balance demands, resources, abilities, and needs. In the Job Demands-Resources (JD-R) Model framework, maintaining a delicate balance between job demands and job resources is crucial for fostering innovation (Adler & Koch, 2017; Bakker et al., 2023). Within the JD-R Model, job characteristics are commonly divided into job resources and demands. Job demands encompass the physical, cognitive, and emotional efforts required for a profession, leading to consequences for workers. On the other hand, job resources play a crucial role in assisting workers in achieving their professional goals and alleviating the burden of their responsibilities (Bakker & Demerouti, 2007).

Lopper et al. (2024) and Zhang and Parker (2019) outlined three distinct forms of approach-oriented crafting behaviour: enhancing structural job resources, social job resources, and challenging job demands. Tims et al. (2012) defined structural job resources include resource variety, advancement opportunities, and autonomy. Secondly, enhancing social job resources is characterised by peer support, coaching from supervisors, and feedback mechanisms. Finally, proactive development behaviours, such as requesting more significant duties and volunteering for specific initiatives, have been identified as contributing to challenging job demands. In contrast to avoidance crafting (hindering job demands), approach-oriented crafting behaviours tend to result in favourable consequences such as engagement, innovation and creativity (Lopper et al., 2024).

As defined by Janssen (2000), innovative behaviour refers to the intentional use of new and advanced concepts, methods, practices, and policies to enhance organisational productivity and long-term sustainability. IWB consists of two crucial components: Idea Generation and Idea Implementation. Idea generation, the initial stage in the innovation process, involves the generation of novel and potentially valuable ideas, focusing on creating new mental connections and fostering curiosity as facilitating factors (Dediu et al., 2018). Creativity significantly influences an individual's ability to generate ideas (Baer, 2012) and paves the way to innovation. Therefore, studying the factors influencing the generation of ideas is an important study area.

This study investigates the intricate relationships among challenging job demands, structural job resources, and idea generation within organisational contexts. Recognising the critical role of challenging job demands in fostering innovation (Janssen, 2000), the research aims to elucidate their specific impact on generating ideas. Additionally, the study addresses the gap in the existing literature by examining how structural job resources directly mediate between challenging job demands and idea generation, which is known to be the moderator in the relationship between challenging job demands and creative outcomes within given literature (Bakker et al., 2023).

Hence, the objectives of the current investigation are:

1. To investigate the association between challenging job demands and idea generation.
2. To explore the connection between challenging job demands and structural job resources.
3. To examine the relationship between structural job resources and idea generation.
4. To study the mediating role of structural job resources in the relationship between challenging job demands and idea generation.

Grounded in established conservation of resource theory, the proposed mediation model posits that when confronted with challenging demands, individuals actively seek and utilise structural job resources, thus mediating the link between the challenging demands placed on them and their ability to generate innovative ideas. This research contributes to a deeper understanding of the dynamics shaping innovation within organisations and holds implications for practitioners and organisational leaders aiming to cultivate environments that foster both creativity and productivity.

Theoretical Framework and Hypothesis Development

Conservation of Resource Theory (Hobfoll, 1989) provides valuable insights into how employees navigate challenging demands while striving to produce innovative ideas. According to this theory, individuals perceive their resources, such as time, energy, skills, and support, as finite and valuable assets that must be carefully managed to cope with stress and achieve their objectives. When employees encounter high job demands, such as tight deadlines, complex tasks, or heavy workloads, their resources become depleted. In response to this depletion, employees may strategically allocate resources by prioritising tasks and activities perceived as crucial or rewarding (Holmgreen et al., 2017). For example, they may invest their limited time and energy in tasks that directly contribute to meeting job demands or organisational goals. Furthermore, employees facing challenging job demands are likely to experience increased levels of stress and pressure. However, Resource Conservation Theory suggests that individuals seek to conserve and maximise their available resources to cope with these demands effectively (Breevaart & Tims, 2019).

In this process, structural job resources play a crucial role. These resources encompass organisational and job factors such as autonomy, information access, and skill development opportunities (Bakker et al., 2023; Bakker & Demerouti, 2017). Employees may strategically leverage these resources to facilitate idea generation despite facing challenging job demands. For instance, they may utilise autonomy to allocate time and energy towards creative endeavours, seek support and feedback from colleagues or supervisors to overcome obstacles or access relevant information and training to enhance their innovative capabilities. By conserving and leveraging these structural job resources, employees can effectively manage their stress levels and enhance their ability to generate new ideas in the face of challenging demands. Therefore, within the framework of Resource Conservation Theory, structural job resources serve as valuable assets that employees actively seek to conserve and utilise to cope with stress and achieve their goals, including generating innovative ideas amidst challenging demands.

Idea generation

Idea generation is the creative process of developing new and innovative concepts and solutions (Foss et al., 2013). It entails brainstorming, thinking creatively, and exploring new possibilities to produce fresh ideas. This process is essential for problem-solving, innovation, and ongoing improvement in organisations (Qu & Liu, 2021). Successful idea generation can lead to significant discoveries, increased productivity, and a competitive edge for the organisation. Effective idea generation fuels innovation by providing the raw material needed for transformative changes and continuous improvement (Lambriex-Schmitz et al., 2020).

Challenging job demands and idea generation

A challenging demand is a stressful situation that, when successfully navigated, can significantly foster personal growth and development (Kim et al., 2024). An under-stimulating job can lead to boredom, which may subsequently result in absenteeism and job dissatisfaction (Janssen, 2000). Thus, for effective work motivation, it is crucial for employees to encounter a suitable amount of challenging job demands. Similarly, the Job Demands-Resources (JD-R) Model (Bakker & Demerouti, 2007) posits that challenging work demands can serve as motivating factors for employees, leading to increased engagement and favourable outcomes in the workplace (Adler & Koch, 2017; Huang et al., 2022; Rudolph et al., 2017). Challenging demands requires effort and has the potential to foster personal growth and provide rewards (N. P. Podsakoff et al., 2007). Examples of job demands categorised as challenges include workload, time pressure, and responsibility (Li et al., 2020). With this line of thinking, the findings of meta-analytical reviews have consistently shown a positive association between challenge demands and outcomes such as engagement (Lesener et al., 2019; N. P. Podsakoff et al., 2007). The challenges present in a job provide opportunities for individuals to gain mastery experiences, leading to increased happiness, self-efficacy and creativity (Sun et al., 2020). Additionally, the relationship between learning and job demands suggests that challenging requirements offer opportunities for growth and improvement, serving a dual role as a source of depletion and motivation (Lawrie et al., 2018). Time pressure, considered a challenging demand, has promoted innovation and encouraged proactive problem-solving (Janssen, 2000), supporting the idea that challenging work can foster innovative behaviour in autonomous work settings. Furthermore, creativity, an essential component of idea generation (Ayoub et al., 2023), is connected to the complexity of challenging work demands, highlighting the positive correlation between challenging job demands and creative output (Sun et al., 2020). Therefore, based on the discussed associations and theoretical foundations,

Hypothesis 1: Challenging job demands positively predict idea generation

Challenging job demands and structural job resources

When employees perceive job demands as more challenging, they strategically search for and utilise support systems, autonomy, and skills development opportunities to manage stress and maintain their performance levels (Hobfoll, 1989). Furthermore, employees can respond to increased challenging demands by developing themselves or enhancing their skill set, which can be referred as structural job resources (Bakker & Demerouti, 2017). In resource-constrained environments, employees may allocate their limited resources to tasks that are perceived as most critical, resulting in a higher utilisation of structural job resources such as time, skills, and technology to meet those challenging tasks (Bakker & Demerouti, 2018). In sum, challenging work demands encourage seeking structural job resources as adaptive coping strategies. Therefore, based on the literature reviewed:

Hypothesis 2: Challenging job demands positively affect structural job resources

Structural job resources and idea generation

Job Demands-Resources (JD-R) model (Demerouti et al., 2001) and Social Cognitive Theory (Bandura, 1986) argue that the presence of structural job resources has a significant impact on employees' capacity to produce ideas. As the JD-R model outlines, structural job resources, including autonomy, developing oneself, and access to information, are crucial facilitators in enhancing employee well-being and performance outcomes (Adler & Koch, 2017). Specifically, autonomy allows employees to exercise discretion and control over their work processes, fostering empowerment and creativity (Dediu et al., 2018). Additionally, employees' participation in personal growth and acquiring fresh abilities cultivates a setting that improves cognitive abilities, consequently encouraging the creation of ideas (Guo et al., 2017). Studies show that individuals who actively pursue chances for self-enhancement are more inclined to demonstrate elevated degrees of originality and novelty (Amabile, 1996).

Furthermore, access to pertinent information and resources equips employees with the necessary knowledge and tools to generate innovative solutions to organisational challenges (Kmieciak, 2020). Based on Social Cognitive Theory, employees' observational learning and self-efficacy beliefs are crucial in leveraging structural job resources for idea generation (Ingusci et al., 2019). Individuals with high self-efficacy are more inclined to actively seek out and utilise available resources to accomplish challenging tasks, including generating innovative ideas (Bandura, 1997). In sum, we posit that structural job resources will positively influence employees' ability to generate creative and innovative ideas. In connotation to the studies mentioned above, we hypothesised that: -

Hypothesis 3: Structural job resources will positively affect idea generation

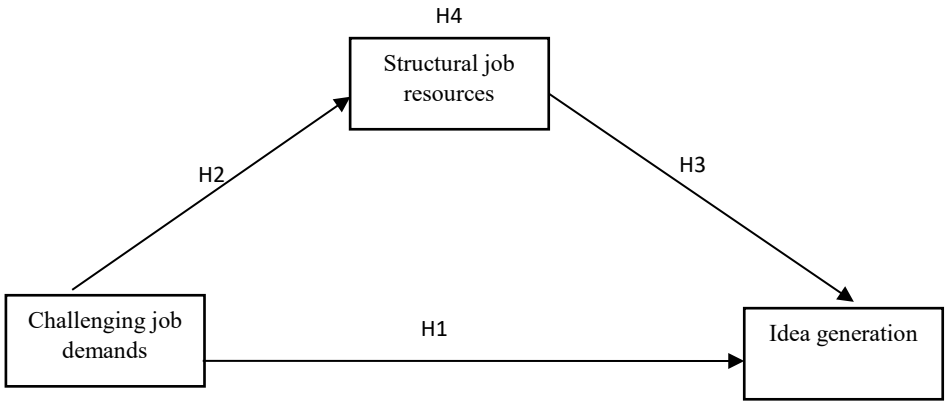
Mediation of structural job resources

Employees who encounter challenging demands, such as an overwhelming workload, time constraints, and tasks that lack clarity, might undergo an increase in stress and strain. As Resource Conservation Theory (Hobfoll, 1989) states, individuals try to conserve and optimise their resources to deal with stress. Within this framework, the presence of challenging work demands might lead employees to engage in cognitive assessments, during which they assess the resources at their disposal to manage the demands effectively. Research by Baer and Oldham (2006) and Petrou et al. (2019) discussed that employees proactively seek resources to manage stress and sustain their performance levels as they encounter challenging work demands. Consequently, this may lead to an enhancement in their capacity to generate creative and groundbreaking ideas. As a result, structural job resources mediation through which the impact of challenging demands on idea generation is directed. In light of the findings mentioned above, we hypothesized that:

Hypothesis 4: Structural job resources mediate the association between challenging job demands and idea generation.

Fig 1 illustrates the theoretical model based on the hypotheses.

Fig. 1: Theoretical model



Source: Authors

2. Methodology

Research design

This study uses a cross-sectional research methodology to investigate how structural job resources affect the relationship between challenging job demands and idea generation. A cross-sectional study utilising a self-reported questionnaire was employed as it is deemed an effective method for gathering practical and reliable data (Babbie, 2020). Furthermore, based on the recommendation by Verma et al. (2020), a convenience sampling technique was employed due to the unknown and widely dispersed nature of the primary population in India. In this study, data were collected using a self-reported questionnaire administered at a single time point.

Method

Data was gathered via a Google form that was a self-reported questionnaire. The responses were selected from full-time corporate workers in various Indian public and private manufacturing and service businesses. The manufacturing and service sectors are vital to India's economy, contributing significantly to GDP and employment (Attiah, 2019). These sectors are hubs of innovation, with manufacturing embracing technologies like automation and AI, and the service sector rapidly evolving through digital advancements. The survey instrument featured a cover letter that guaranteed respondent anonymity and provided detailed information about participation options. Respondents were assured that the data collected would be exclusively used for research purposes. Agarwal and Gupta (2018) highlighted that gathering data from varied sources enhances the diversity of responses and improves the generalizability of the findings. Participants were selected based on their demographic characteristics and their roles related to innovation in manufacturing and service sector companies. They possessed experience in innovation management, research and development, and process improvement, ensuring they could respond to the survey items clearly and effectively. A google form was forwarded to potential participants by email and WhatsApp. There was no incomplete response because all responses to the items were necessary.

A total of 240 employees were issued the questionnaire, and 190 responded, yielding a response rate of 79.16%. The sample size of 190 is considered adequate for this study, adhering to the guidelines by Hair et al. (2010), which suggests that the sample size should be at least

five to ten times the number of items in the study. The respondents' gender revealed that 43.15% of them were men. In that order, the workforce consisted of 1.57% people with a diploma, 27.368% people with graduate degrees, 53.68% people with post-graduate degrees, and 17.368% people with doctorates.

Measures

The items from previous research were adapted to suit the variables under study. A 7-point Likert scale was used for scoring, where 1 signified "strongly disagree" and 7 signified "strongly agree" for "Idea Generation," and 1 signified "never" and 7 signified "always" for "structural job resources" and "challenging job demands".

Structural job resources ($\alpha = 0.872$). Tims et al. (2012) created a five-item structural job resources sub-scale to investigate this construct. "I try to learn new things at work", "I decide on my own how I do things", and "I try to develop my capabilities" are sample items.

Challenging job demands ($\alpha = 0.863$). Tims et al. (2012) created a five-item challenging job demands sub-scale to investigate this construct. The 5-item sub-scale was reduced to 4 items due to lesser factor loading. "When there is not much to do at work, I see it as a chance to start new projects", "If there are new developments, I am one of the first to learn about them and try them out", and "I try to make my work more challenging by examining the underlying relationships between aspects of my job" are sample items.

Idea generation ($\alpha = 0.872$). The five-item idea generation subscale developed by Ayoub et al. (2023) was used to investigate this construct. "I propose new ideas for development within the organisation", "I am able to express personal opinions about basic problems in the workplace", and "I discuss personal ideas for work improvement with colleagues" are examples items of idea generation.

4. Analysis and results

Analytical technique

For testing and validating the measurement model of the study, we used "Structural equation modelling" (SEM) and "Confirmatory factor analysis" (CFA). Five thousand bootstraps resample for bootstrapping using PROCESS macro in IBM SPSS Statistics 27 at a 95% confidence range are utilised to address the non-normality of the data.

Measurement model

In AMOS 27, we used CFA to analyse the measurement model, which includes all the constructs in the study. To check the model fit, we used AMOS to fit the model. The measurement model demonstrated a satisfactory fit with the data ($p < 0.01$, $\chi^2/df = 1.686$, $df = 82$, $\chi^2 = 138.247$, NFI $= 0.913$, CFI $= 0.962$, TLI $= 0.951$, RMSEA $= 0.060$, GFI $= 0.915$) (Hooper et al., 2008; Hu & Bentler, 1999). The indicator items and their latent constructs showed a significant association between them.

Common method variance

The risk of method bias cannot be disregarded because the design used in this study was cross-sectional. We included a cover letter with our survey form, as recommended by Podsakoff et al. (2003). The participants received our assurances that we would protect their identities and only utilise the data for the study. In order to further eliminate item ambiguity and assess responses for each item, a seven-point Likert scale was employed in the survey questionnaire. To aid the participants in understanding the ratings, all of the scale's points were labelled (Krosnick, 1991). The participants were also instructed to answer each question honestly to prevent anxiety over their performance on the test (P. M. Podsakoff et al., 2012).

We employ the one-factor test proposed by Harman (1976) to analyse the impact of the first single factor to statistically address the influence of common technique bias. The likelihood of common technique bias was decreased because the first single factor explained 44.720% of entire variance (less than 50%). According to Conway and Lance (2010), if a researcher chooses to employ a self-referenced transversal research design, they should have a good reason for doing so. According to Rindfleisch et al. (2008), a self-referenced questionnaire could be used if the study participants are knowledgeable enough to provide clear and unbiased answers. Considering our study's participants had educational backgrounds ranging from a diploma to a Doctorate, they were well-educated and could reply to the items. As a result, we thought of procedural and statistical fixes to lessen the hazard of method biasness.

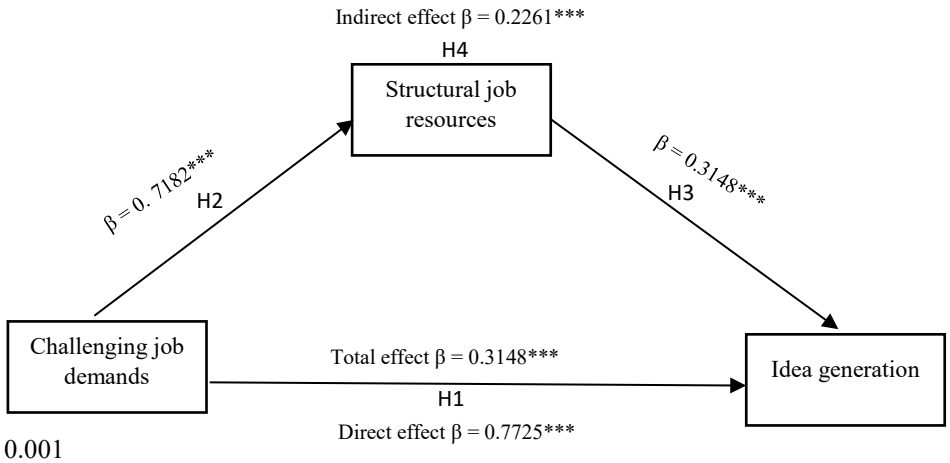
Convergent validities and discriminant validities

Internal consistencies were determined by calculating Cronbach's alpha (α) coefficient and comparing it to the threshold limit of 0.6, which ranges from 0.851 to 0.872 (Fornell & Larcker, 1981). Moreover, composite reliability (CR) was tested to see if the constructs were reliable. The CR values of all the constructs ranged from 0.819 to 0.862, beyond the 0.7 threshold limit (Anderson & Gerbing, 1988; Nunnally & Bernstein, 1994). Similarly, convergent validity was investigated per Fornell and Larcker's (1981) recommendations. The convergent validity criteria were satisfied by the average variance extracted (AVE) values, which were above the cutoff of 0.5 and varied from 0.535 to 0.572. The AVE should be higher compared to the Square of the inter-factor correlations to further establish discriminant validity (Fornell & Larcker, 1981). As a result of the inter-factor correlations being lower than the AVEs, it was found that all of the constructs had enough discriminant validity. Table 1 displays the AVE, CR, and Cronbach's alpha values.

Hypothesis testing

Data from AMOS were imputed to SPSS statistics to analyse the hypotheses. The bootstrap estimation (with 5000 resamples) using PROCESS macro (Hayes, 2018) was used to examine the significance of relationships. The structural model with standardised path coefficients showed a decent fit to the data, like the measurement model, using challenging job demands as an antecedent, structural job resources as a mediator, and idea generation as the dependent variable (Fig 2).

Fig. 2: Structural Model and their standardized path coefficients



Note: *** p < 0.001

Source: Author

Table 1 Mean, Correlations, Standard Deviation, CR, and Cronbach alpha

		Alpha	Composite reliability	M	SD	1	2	3	4	5	6	7	8
1	Gender					-							
2	Age					0.013	-						
3	Education					0.139	.160*	-					
4	Organization Status					-0.116	0.054	0.212**	-				
5	Job position					0.090	-0.393**	-0.026	0.065	-			
6	CJD	0.851	0.819	4.87	0.888	0.056	0.150*	0.011	-0.087	-0.136	**0.535**	0.4070	0.4788
7	STJR	0.863	0.862	5.84	0.747	0.057	0.067	-0.020	0.021	-0.118	0.638***	**0.559**	0.4070
8	IG	0.872	0.869	5.28	0.934	0.004	0.101	-0.013	-0.030	-0.153*	0.692***	0.638***	**0.572**

Note: *p < 0.05 (2-tailed), **p < 0.01 (2-tailed) and ***p<0.001., CJD = challenging job demands, STJR = structural job resources, IG = idea generation, Values below the diagonal = Inter-factor correlations, SD = Standard deviation, value above the diagonal = (inter-factor correlations)^2, Bold values moving diagonally = Average variance extracted.

Source: Author

H1**:** As hypothesised, challenging job demands positively affected idea generation (β = 0. 7725, p < 0.001). Thus, the above-formulated hypothesis one was confirmed.

H2**:** Challenging job demands positively affected structural job resources (β = 0.7182, p < .001). Thus, the above-formulated hypothesis second was confirmed.

H3**:** Structural job resources were positively associated with the idea generation (β = 0.3148, p < 0.001). Thus, the third hypothesis was confirmed.

H4**:** Challenging job demands significantly indirectly affect idea generation through structural job resources. The indirect effect was significant (β = 0.2261, Boot SE=0.0528, CI=0.1243-0.3322) as both Boot LLCI and Boot ULCI are positive. Therefore, the finding shows that structural job resources partially mediate the association between challenging job demands and idea generation (refer to Table 3). Thus, the above-formulated fourth hypothesis was also confirmed.

Table 2: Hayes PROCESS macro finding

(Tested Hypothesis)	**Estimate**		**95% Class interval Bootstrapped**	
	Standardized regression coefficient	**Standard Error**	**Lower**	**Upper**
H1 CJD → IG Total Effect	0.7725	0.0487	0.7166	0.9088
H2 CJD → STJR Total Effect	0.7182	0.0427	0.5201	0.6886
H3 STJR → IG Total Effect	0.3148	0.0783	0.2391	0.5481
H4 ICJD →STJR → IG				
Total effect	0.7725	.0487	0.7166	0.9088
Direct effect	0.5749	.0659	0.4448	0.7049
	Effect	**Boot SE**	**Boot LLCI**	**Boot ULCI**
Indirect effect	0.2261	.0528	0.1243	0.3322

Note: CJD = challenging job demands, STJR = structural job resources, IG = idea generation, **Source: Author**

Discussion

Examining the relationship among challenging job demands, structural job resources, and the generation of innovative ideas provides valuable insights into the current body of knowledge on job crafting and creativity in the work environment within the conservation of resources theory. The present discussion summarizes the results of our investigation within the framework of established theories and previous studies, offering organized evidence to support our hypothesis results.

Challenging job demands and idea generation

Our research validates the first hypothesis, suggesting a favourable association between challenging work demands and the generation of ideas. Consistent with the job demands-resources (JD-R) model (Adler & Koch, 2017; Bakker & Demerouti, 2018), our findings clarify that challenging demands serves as a catalyst for employees, motivating them to expand their knowledge and skills, thereby creating a favourable environment for fostering creativity. The inherent motivational impetus from challenging tasks empowers employees to delve deeper into problem-solving processes, enhancing their innovative thinking ability. This aligns with previous studies (e.g., Bakker et al. 2023; Huang et al., 2022) emphasising how challenging roles can invigorate employees' perspectives, enhancing their creative potential.

Challenging job demands and structural job resources

Our second hypothesis is supported by empirical evidence, showing a positive relation between initial challenging job demands and structural job resources. This finding aligns with the concept of employee proactive behaviour, which proposes that employees who face challenging job demands are motivated to proactively enhance their structural job resources to meet these demands effectively. This proactive adjustment is consistent with the findings of Huang et al. (2022), particularly among teachers who actively strive to improve their professional capabilities in response to the ever-changing demands of the educational environment.

Structural job resources and idea generation

The validation of our third hypothesis highlights the importance of structural job resources in promoting idea generation. Workers can significantly enhance their creative productivity by actively improving the structural job resources. This process of enhancing resources allows for a broader range of cognitive and behavioural abilities, which in turn facilitates the generation of innovative solutions and ideas (Binnewies et al., 2008; Massei et al., 2022). This finding aligns with the research conducted by Huang et al. (2022), who demonstrate the empowering effect of developing structural resources on teachers' instructional approaches, thereby fostering a conducive environment for creative learning.

Mediation of structural job resources

Our fourth hypothesis, which suggests that structural job resources partially mediate the relationship between challenging demands and idea generation, highlights the complex interactions between job demands, job resources, and creative results. According to our investigation, employees must proactively accumulate structural work resources (i.e. opportunity for development) to navigate the path from challenging demands to idea generation. For instance, when employees face highly challenging demands, such as tight deadlines or complex projects, individuals can leverage opportunities for development to enhance their skills and knowledge, thus turning potential stressors into catalysts for innovation. The theoretical claims of Huang et al. (2022) and Petrou et al. (2019) are supported by the mediating role of structural job resources, which reveals a crucial mechanism via which job demands convert into idea generation. These researchers proposed that when workers actively seek out and improve

their structural job resources in the face of challenging demands, such as pressure or task conflicts, they exhibit the highest levels of creativity.

Theoretical Contribution

The theoretical contributions of this study are based on the Conservation of Resources (COR) theory, which offers valuable insights into the connection between challenging job demands, structural job resources, and idea generation within the context of job crafting. By integrating COR theory with empirical findings on the dynamics between challenging job demands, structural job resources, and idea generation, this research enhances our comprehension of how individuals and organizations can cultivate creativity and innovation within the workplace.

Expanding Conservation of Resources (COR) theory

The Conservation of Resources (COR) theory suggests that individuals endeavour to acquire, maintain, and safeguard their valuable resources (Hobfoll, 1989). Our study expands upon this theory by demonstrating how the pursuit and improvement of structural job resources in reaction to challenging job demands can generate ideas. This expansion emphasizes a proactive aspect of COR theory, in which individuals aim to preserve resources and actively enhance them to promote creativity and innovation. In response to job demands, this proactive engagement with resources highlights a novel application of COR theory that extends beyond its traditional focus on stress and coping.

Catalyst function of job demands as a driver of resource expansion

Traditionally, COR theory has emphasized the loss and preservation of resources (Holmgreen et al., 2017). However, our findings illuminate how challenging job demands can catalyse expanding resources, thereby enriching the COR theory. By demonstrating that challenging job demands lead to proactively seeking structural job resources, which fosters idea generation (Petrou et al., 2019), this research suggests that challenges in the workplace can be instrumental in triggering a positive cycle of resource accumulation and creative output. This positive reinterpretation of job demands contributes to a more nuanced understanding of COR theory, emphasizing the potential for growth and development inherent in facing workplace challenges.

Practical Implications

Based on the findings discussed above, several practical implications can be derived for organizations aiming to promote employee innovation and creativity. These implications revolve around the strategic management of job demands and the augmentation of job resources to stimulate innovative behaviour and creative outcomes. Firstly, organizations must acknowledge the dual nature of challenging job demands (van den Broeck et al., 2010). While excessive demands can result in stress and burnout, appropriately managed challenging demands can catalyse creativity and innovation. Employers have the opportunity to introduce stimulating and challenging tasks that motivate employees to expand their capabilities and think beyond conventional boundaries (Janssen, 2000). This may entail assigning projects that require acquiring new skills or resolving intricate problems, fostering a sense of accomplishment and personal development upon overcoming these challenges. Secondly, organizations can facilitate creativity among workers by offering training and development opportunities that empower employees to acquire new skills and knowledge (Bakker & Xanthopoulou, 2013). This not only aids employees in effectively managing challenging demands but also enhances their capacity for creativity and innovation. Thirdly, organizations can promote this proactive behaviour by establishing an environment that nurtures employees' pursuit of learning opportunities, collaboration with peers, and taking the initiative in their professional growth. This can be accomplished by implementing mentoring programs, cross-functional team projects, and platforms for knowledge sharing and collaboration (Bakker et al., 2023).

Fourth, top-level managers should embrace a comprehensive approach to job design that balances challenging tasks with adequate resources. This entails assigning challenging demands and ensuring that employees have access to necessary resources such as time, management support, and a positive work environment that cultivates creativity and innovation. Lastly, the practical implications extend to human resources practices, particularly recruitment, training, and performance management. Organizations should prioritize recruiting individuals who are adaptable and proactive towards acquiring resources. Training programs should focus on cultivating employees' ability to handle challenges and enhance their resourcefulness creatively. Performance management systems should acknowledge and reward both achieved task outcomes and the innovative processes and creative endeavours undertaken by employees (Bos-Nehles et al., 2017).

Limitation and future direction

Our study has several drawbacks, but these can be overcome in subsequent lines of research, like any study. First, as this research design is cross-sectional, it is essential to consider the possibility of common method bias. More studies may be done through longitudinal and experimental research methodologies. Also, there may have been response biases because the respondents' information was gathered through a self-referenced survey. Even though many statistically driven and procedural methods and measures have been developed to mitigate the unfavourable prejudice resulting from common methods, CMV's influence cannot be disregarded.

Second, the sample was collected from workers hired by private and public service and manufacturing firms in India. Future research can, therefore, be done on people in particular industries. Third, because the developed measurement model is evaluated in the Indian environment, subsequent analysis can be done using the same model in different countries and contexts. Fourth, social job resources (Supervisory support, peer support) and personal resources (hope, self-assurance) could also be examined as moderators or mediating variables to understand the connection between challenging job demands and idea generation. Fifth, the potential impact of several demographic factors, including respondents' qualifications, age, and gender, had not been considered, which could be employed as a moderator variable and confounding variable to comprehend the association between challenging job demands and idea generation.

Sixth, "decreasing hindering job demands" could be examined as a mediating variable in the same model through sequential mediation. Lastly, the interaction between people and contexts plays a significant role in creativity. To better understand how the various elements interact and influence employees' creativity and idea generation at multiple levels, it will be helpful to include internal organisational factors, like the organisation's culture, or employees-level factors, like being creatively inclined personality or employed in a regular or temporary position.

Conclusion

The present research contributes to the advancement of knowledge regarding the interaction between challenging job demands, structural job resources and the generation of ideas within the Conservation of Resources (COR) theory framework. The empirical evidence supports our hypotheses by highlighting the positive association between challenging job demands and idea generation, with structural job resources mediating this relationship. Specifically, we found that employees facing challenging job demands are more likely to generate innovative ideas when they have access to adequate structural job resources such as autonomy, support, and development opportunities. The findings make a theoretical contribution by shedding light on the mechanisms of conservation of resources theory in promoting creativity in the workplace.

Practically, organisations are advised to enhance their structural job resources by implementing policies that increase employee autonomy, providing continuous support through mentoring and coaching, and creating opportunities for professional development. For example, companies could introduce flexible work schedules and provide platforms for employee collaboration and idea sharing. This research emphasises leveraging these dynamics to cultivate environments that foster creativity and drive organisational innovation.

Disclosure statement

Conflict of interest

The paper's authors affirm that they have no competing interests concerning the present research.

Financial interest

Regarding this research article, I hereby declare that I have no financial interests, affiliations, or other connections that might be construed as conflicts of interest. There are no conflicting financial interests or outside forces that might have an impact on the study's substance, findings, or conclusions.

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Appendix

Factor Loadings of items with their Description

Item	Item Description	Loading
"Challenging job demands."		
CJD1	"When an interesting project comes along, I offer myself proactively as project co-worker."	0.839
CJD2	"If there are new developments, I am one of the first to learn about them and try them out."	0.780
CJD3	"When there is not much to do at work, I see it as a chance to start new projects."	0.667
CJD5	"I try to make my work more challenging by examining the underlying relationships between aspects of my job."	0.617
"Structural job resources."		
STJR1	"I try to develop my capabilities."	0.752
STJR2	"I try to develop myself professionally."	0.806
STJR3	"I try to learn new things at work."	0.828
STJR4	"I make sure that I use my capacities to the fullest."	0.753
STJR5	"I decide on my own how I do things."	0.572
"Idea generation."		
IG1	"I propose new ideas for development within the organization."	0.705
IG2	"I am able to express personal opinions about basic problems in the workplace."	0.656
IG3	"I discuss personal ideas for work improvement with colleagues."	0.807
IG4	"I share ideas about concrete changes at work with colleagues."	0.855
IG5	"I suggest improvements to ideas expressed by colleagues or bosses at work."	0.742

Note: CJD = challenging job demands, STJR = structural job resources, IG = idea generation