Unravelling of moderating effect of progressive education between job demand and burnout

Rupesh Rajak
Symbiosis Law School, Symbiosis International University, Hyderabad, India
Binod Rajak
Department of Management Studies, NALSAR University of Law, Hyderabad, India
Vimal Kumar
Department of Information Management, Chaoyang University of Technology, Taichung, Taiwan, and
Swati Mathur
Department of Management, Institute of Public Enterprise, Hyderabad, India

Abstract

Purpose – This study aims to provide a causal framework for teacher burnout (BO) and work engagement (WE) by examining the factors that contribute to it and evaluating how progressive education (PE) affects teachers’ performance in Higher education institutions (HEIs).

Design/methodology/approach – This study uses a multi-stage sampling technique with the help of computer random generation data from a selected list of teachers. The survey has two sections; the first consisted of a questionnaire of PE, BO, WE and organizational outcomes and the second contained four items to measure the demographic variables. The researcher contacted 745 teachers and asked them to fill up the questionnaire but the authors received only 498 useable responses.

Findings – The results of the study confirmed that moderating role PE reduces the BO of the teachers of HEIs and increases WE. The job demand-resource (JD-R) model was also validated in the Indian context and the model was found suitable for the Indian sample.

Research limitations/implications – The study has been conducted to manage BO and teachers’ engagement in HEIs and the result suggests that the Management of HEIs should value PE characteristics as a crucial component of the educational process. PE encourages academic engagement among professors and students in HEIs.

Originality/value – The study tests the moderating role of PE with the JD-R and the JD-R model in the higher education system in India, which is rarely tested. The study’s integrated approach to BO and WE, which provide insight into both viewpoints and aids in employees’ poor health.

Keywords Progressive education, Burnout, Engagement, HEIs, Job demand, Job resource, JD-R model, Random sampling

Paper type Research paper

1. Introduction

Globalization has intensified competition in higher education, prompting institutions to refine faculty recruitment. Teachers now play a crucial role in student advancement but face challenges like insufficient salaries, workload and student conduct issues, contributing to high burnout (BO) rates (Janssen, 2005; Zee et al., 2016; Hakanen et al., 2006; Galanti et al., 2021; Teles et al., 2020; TNO, 2010; Aratijo et al., 2019).

The authors would like to thank the two anonymous reviewers, Associate Editor, and Editor-in-Chief for their valuable comments and suggestions that helped to improve the manuscript.

Funding: The authors received no financial support for the research, authorship and/or publication of this article.

Declaration of conflicting interests: The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.
Progressive Education (PE) advocates for student-centred learning, fostering democracy, creativity and reduced bureaucratization in education (Weichhart et al., 2018). It encourages a collaborative approach between students and teachers (Lin, 2022), emphasizing teacher participation and shared responsibility. Despite the profession’s challenges, studies point to increasing stress among educators (Janssen, 2005; Huang et al., 2019; Rajak and Singh, 2021; Bhuin, 2017; Singh, 2014; Privadashrini et al., 2015; Reddy et al., 2018), with understaffing highlighted as a stressor (Reddy and Poornima, 2012; Rana and Soodan, 2019). To improve the learning environment, teachers and students recognize the need for change (Huynh-Cam et al., 2022; Rajak et al., 2022), addressing the educational system’s shortcomings that seemingly benefit institutional owners. Burnout is often linked to job-induced alienation (Pareek, 1988). While work engagement (WE) is proposed as a BO antidote, its effectiveness is debated, with concerns that continuous high engagement can lead to cognitive impairment (Schaufeli et al., 2017; Bakker, 2011; Sonnentag et al., 2010).

This study focuses on the student-teacher relationship central to PE. Teachers who are overworked due to high student-faculty ratios face BO, with current ratios at 1:28, far from the UGC’s recommended 1:10 (AISHE, 2020). PE seeks to improve academic, social and emotional well-being (Dewey, 1938), advocating for democratic classrooms and constructivist learning (Kohn, 2015). Understanding PE’s impact on teacher well-being is vital. The job demands-resources (JD-R) model by Bakker and Demourti (2007) helps assess how job demands and resources influence teacher exhaustion and W, providing insights into addressing teacher BO.

The study raised the subsequent research questions:

**RQ1.** What factors contribute towards WE and teachers’ BO?

**RQ2.** Can instructors in the Indian context use the framework of the JD-R model?

**RQ3.** How does PE affect teacher BO and their WE?

**RQ4.** Does teacher BO and their WE depend on the institution and their designation?

Thus, the following research objectives are elucidated: (1) to find the causes of teachers’ BO and engagement at work and create a causal framework for it. (2) To examine the effect of PE on BO and WE (3) to investigate the antecedents and investigate the impact of PE on enhancing employee performance at India’s Higher education institutions (HEIs).

In conclusion, study’s findings are significant for higher education institutions in India and beyond. By understanding the causes of teacher BO and the role of PE in fostering WE, institutions can better support their faculty and improve performance. The study underscores the need for further research on PE’s impact on student outcomes and the teacher-student dynamic. It adds to the dialogue on teacher BO and PE, spurring additional inquiry into this critical area.

**2. Literature review and framework**

**2.1 Job demand-resources model**

JD-R Model by jobs that could potentially cause stress; this occurs when they exceed an employee’s capacity for adaptation (Bakker, 2014; Bakker and de Vries, 2021). JDs are generally the organizational, social or physical and psychological required job and effort of employees (Hockey, 1997; Kubicek and Korunka, 2017; Abdel et al., 2021). The study suggests that the subjective and emotional demands placed on instructors can lead to BO, which may result in various negative outcomes such as psychosomatic symptoms, protests and limitations in the way that instruction is carried out. This highlights the importance of addressing the factors that contribute to BO among teachers, such as JD and resources, in order to promote their well-being and ensure the quality of education they provide (Rudow, 1999; Harmsen et al., 2019). Job Resources are those organizational, social, psychological and physical characteristics of work that help achieve objectives and lessen the need for
The existence of two psychologically distinct work-specific processes is one of the fundamental ideas of the JD-R theory. In the first step, there is a persistent shortage of some types of employment despite rising demand for them (Demerouti et al., 2001). Due to exhaustion, the organization suffers from absenteeism and inadequate performance (Bakker et al., 2004). Additionally, employees who serve as clients, also including teachers, have demonstrated that the workplace promotes devotion and effectiveness outside of the profession (Bakker et al., 2004).

2.2 Hypothesis development

2.2.1 Burnout and organizational outcomes. Job stress is not only related to one organization; it has become a global concern, leading to physical, mental and psychological blight (Sauter and Murphy, 1995; Maslach and Leiter, 2016). Burnout is a well-documented phenomenon linked to a range of adverse organizational outcomes. Studies have shown that BO can lead to decreased job satisfaction, increased absenteeism and employee turnover intentions (von Hippel et al., 2019; Jun et al., 2021; Bakker and Demerouti, 2017; Maslach and Leiter, 2016). In addition, BO has been associated with reduced organizational commitment and performance, as well as increased levels of conflict and stress in the workplace (Halbesleben and Buckley, 2004; Schaufeli and Bakker, 2004; Rajak et al., 2023; Gopalan et al., 2021; Vincent et al., 2022).

Furthermore, research has suggested that BO can significantly impact the quality of services provided by organizations, particularly in the healthcare and education sectors (Shanafelt et al., 2015; Van den Berghe et al., 2014). For example, BO among healthcare professionals has been linked to lower patient satisfaction and increased medical errors (Shanafelt et al., 2015). Similarly, teacher BO has been associated with lower student achievement and engagement (Kyriacou and Sutcliffe, 1978; Skaalvik and Skaalvik, 2018; Rajak et al., 2023). Burnout is a form of stress that is brought on by the job. The current study thus pre-supposes that exhaustion harms employment outcomes.

The literature suggests that BO can have far-reaching consequences for employees and organizations. As such, organizations need to prevent and address BO among their employees to promote their well-being and ensure the quality of services they provide.

H1. Burnout is negatively related to organizational outcomes. Specifically, higher levels of BO among employees are expected to be associated with lower levels of job satisfaction, organizational commitment and performance, as well as increased absenteeism and turnover intentions directly related to organizational outcomes.

2.3 Mediation Moderation model

One of the critical frameworks used in this study is the mediation model of burnout and WE (Schaufeli et al., 2002; González-Romá et al., 2006; Hakanen et al., 2006; Simbula et al., 2012). This model proposes that JD and JR have a direct effect on BO and WE but that the relationship between JD and BO, as well as the relationship between JR and WE, is mediated by JR and BO, respectively (Schaufeli et al., 2002). Several administrative issues arise when JD is increased. A compensatory effort is necessary to deal with the increasing demand, maintain performance levels and see that it is mentally and physically cost-related.

Job demands (i.e., time pressure, emotional demands and interpersonal conflict) require sustained effort and are associated with physiological and psychological costs (Bakker and Demerouti, 2017; Llorens et al., 2007). On the other hand, job resources refer to the physical, psychological and social aspects of a job that are functional in achieving work goals, reducing job demands, and stimulating personal growth, learning and development (Bakker and
Examples of job resources include social support, opportunities for skill development and training, and a positive work environment. JR is connected to organizational outcomes in a motivating process through engagement at work. JR may contribute intrinsically to employee motivation because they support their development, learning and advancement. This results from the organization providing employees with adequate resources to fulfill their work objectives and opportunities for learning, growth and progress (Hakanen et al., 2006). JR is a positive construct that helps increase job outcomes, i.e., WE (Rajak et al., 2023). However, when JR is insufficient, it will increase employees’ BO (Mudrak et al., 2018; Barkhuizen et al., 2014). The mediation model of burnout and WE suggests that job resources can buffer the harmful effects of JD (Schaufeli et al., 2002). In other words, when teachers have access to JR, they are better equipped to cope with the demands of their jobs and are less likely to experience BO (Schaufeli and Bakker, 2004; Simbula et al., 2012). The literature has sufficient evidence to conclude that inadequate JR will result in BO and low engagement and mediate the association between WE and JR (Bakker et al., 2004; Roslan et al., 2015; Ahmad et al., 2020; Russell et al., 2020).

Many times, more autocratic practices are considered the cause of teacher BO. Teachers and students frequently perceive the classroom or school as exhilarating since it is typically built on mutual respect and trust (Dworkin et al., 2003). According to academic research, democratic school policies and practices significantly reduce teacher BO (Bas, 2011; Dworkin et al., 2003). The literature review suggests that JD and JR influence teacher BO and WE (Bakker and Demerouti, 2014; Schaufeli and Bakker, 2004).

PE encourages student-centred learning, supports democratic classrooms and aligns instruction with constructivist learning (Kohn, 2015). PE advocate the well-being of students. The literature also suggests that PE can play a moderating role in reducing teacher BO and increasing WE (Fiorilli et al., 2017). PE has been found to improve students’ academic performance and social and emotional health (Dewey, 1938). By valuing PE characteristics as a crucial component of the educational process, institutions can encourage academic engagement among professors and students. This can help create a supportive and engaging environment that promotes teacher well-being and job satisfaction. Some scholars have highlighted the issue of how PE will assist teachers in this contemporary era of the educational system. However, the relationship between PE and teachers’ well-being is still unclear (Reynolds, 1997; Haba and Freed, 2000; Dworkin et al., 2003; Little, 2013). Therefore, it is critical to understand how PE affects and benefits instructors’ well-being.

Overall, this study highlights the importance of understanding the role of JD, JR and PE in promoting teacher well-being and job satisfaction (JS). By providing access to PE resources and valuing its characteristics, institutions can create a supportive and engaging environment that promotes teacher well-being and JS. This can help improve overall performance and outcomes for both teachers and students. Based on the above argument, we hypothesize the following hypothesis.

**H2.** The relationship between job demands and organizational outcomes is mediated by BO. JD can lead to BO, negatively impacting organizational outcomes such as job performance, job satisfaction and employee turnover.

**H3.** WE mediates the association between JR and organizational outcomes. JR can lead to WE positively impacting organizational outcomes such as job performance, job satisfaction and employee retention.

**H4.** Burnout mediates the relationship between JR and WE. Job resources can lead to BO, which can negatively impact WE.

**H5.** The connection between JD and BO is moderated by PE. We expect that teachers with access to PE resources will experience lower levels of BO, even when faced with high job demands.
The affiliation between WE and job engagement is moderated by PE. We expect that teachers with access to PE resources will experience higher levels of WE, even when faced with low job resources.

The proposed model is presented in Figure 1.

3. Methodology
3.1 Methods and sampling
The research was orchestrated utilizing the multi-stage random sampling (MSRS) method, leveraging computer-generated random data from a preselected roster of teachers (Onwuegbuzie et al., 2007). This technique facilitated the selection of a diverse range of educators from multiple higher education institutions across the northern and eastern regions of India, thereby ensuring efficiency in terms of time and cost (Rahman et al., 2022; Etikan and Bala, 2017). The survey was bifurcated into two segments; the initial segment consisted of a 75-item scale, while the latter comprised four queries that captured demographic data such as gender, age, type of institutions and job title.

The Maslach BO inventory-general scale was employed to gauge the degree of BO in the teacher population based on Maslach burnout inventory-general survey (MBI-GS) (Schutte et al., 2000). The study utilized two scales to assess the primary symptoms of BO fatigue and cynicism each comprising three items. The ‘WE’ was evaluated via the Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002). Initially, higher education institutions from northern and eastern India were identified, encompassing private, public and semi-public institutions. Twenty-two institutions were preliminarily selected, leveraging the researcher’s network. Each participant was assigned a unique identification number through a

![Proposed model](image-url)

**Source(s):** Proposed Model (Adapted from Arnold B. Bakker and Evangelia Demerouti, 2007)
computerized randomization process. The researcher contacted 745 educators via social media platforms but received 498 (67%) for further analysis.

4. Results

4.1 Demographic analysis

The study examined demographic data of teachers from various HEIs, focusing on age, institution type, job title and gender. Respondents were categorized based on their workplace: government (37.35%, n = 186), private universities (46.7%, n = 234) and government-aided private institutions (15.66%, n = 78). The majority of participants were assistant professors (60.44%, n = 301), followed by associate professors (27.51%, n = 137) and professors (12.05%, n = 60). Age distribution among respondents was segmented as follows: 25–30 years (14.46%, n = 72), 31–35 years (28.11%, n = 140), 36–40 years (25.10%, n = 125), 41–45 years (13.86%), 46–50 years (9.04%), 51–55 years (6.02%, n = 30), and the least represented were the 56–60 and over 60 years age groups (2.21 and 1.20%, respectively). This demographic breakdown provides insight into the composition of faculty within higher education, highlighting a predominance of younger educators in assistant professor roles, with a significant portion employed by private institutions, tables and figures accompanying the text detail the frequency and percentages of each category for further clarity. Table 1 shows the demographic details of respondents, Table 2 shows the frequency and percentage for type of institute, and Table 3 explains the frequency and percentage of designation. Figure 2 outlines the pie chart showing the distribution of age, Figure 3 shows the pie chart showing numbers of respondents working in different types of institutions, and Figure 4 represents the pie chart showing numbers respondents working in designation.

4.2 Confirmatory factor analysis (CFA) and convergent and discriminant validity

Confirming the study’s validity and reliability, Cronbach’s alpha scores in Table 4 ranged from 0.786 to 0.945, surpassing the 0.7 benchmark (Hair et al., 1998; Nalluri et al., 2020; Jha et al., 2022;

<table>
<thead>
<tr>
<th>Age groups</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>25–30 years</td>
<td>72</td>
<td>14.46</td>
<td>14.46</td>
<td>14.46</td>
</tr>
<tr>
<td>31–35 years</td>
<td>140</td>
<td>28.11</td>
<td>28.11</td>
<td>42.57</td>
</tr>
<tr>
<td>36–40 years</td>
<td>125</td>
<td>25.10</td>
<td>25.10</td>
<td>67.67</td>
</tr>
<tr>
<td>41–45 years</td>
<td>69</td>
<td>13.86</td>
<td>13.86</td>
<td>81.53</td>
</tr>
<tr>
<td>46–50 years</td>
<td>45</td>
<td>9.04</td>
<td>9.04</td>
<td>90.57</td>
</tr>
<tr>
<td>51–55 years</td>
<td>30</td>
<td>6.02</td>
<td>6.02</td>
<td>96.59</td>
</tr>
<tr>
<td>56–60 years</td>
<td>11</td>
<td>2.21</td>
<td>2.21</td>
<td>98.8</td>
</tr>
<tr>
<td>61 years and above</td>
<td>6</td>
<td>1.20</td>
<td>1.20</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>498</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Table 1. Demographic details

Source(s): Author’s own work

<table>
<thead>
<tr>
<th>Type of institutes</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid percent</th>
<th>Cumulative percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>186</td>
<td>37.35</td>
<td>37.35</td>
<td>37.35</td>
</tr>
<tr>
<td>Private</td>
<td>234</td>
<td>46.99</td>
<td>46.99</td>
<td>84.34</td>
</tr>
<tr>
<td>Government aided private</td>
<td>78</td>
<td>15.66</td>
<td>15.66</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>498</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Table 2. Frequency and percentage for type of institute

Source(s): SPSS Output
Factor loadings between 0.71 and 0.95 exceeded the 0.6 standard \cite{Chin1997, Kumar2016, Raj2023, Singh2023a, Verma2022}. Composite reliability for all constructs was between 0.79 and 0.95, well above the 0.6 threshold \cite{Bagozzi1988, Paliwal2022}. Convergent validity, assessed through factor loadings, AVE (0.54–0.87) and composite reliability (CR), met the criteria with AVE values above 0.5 \cite{Hair1998}. Discriminant validity was confirmed, with the square root of AVE for each construct greater than its inter-construct correlations \cite{Chin1998, Verma2023}.

As indicated in Table 5, the model fit was robust, with comparative fit index (CFI) and goodness-of-fit index (GFI) indices at 0.985 and 0.959, respectively well above the 0.90 guideline. standardized root mean square residual (SRMR) at 0.0506 and root mean square error of approximation (RMSEA) at 0.01 with p of Close fit (PCLOSE) over 0.05 confirmed the model’s adequacy \cite{Hu1999, Mittal2023, Singh2023b}. A significant

<table>
<thead>
<tr>
<th>Designation</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid percent</th>
<th>Cumulative percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Professor</td>
<td>301</td>
<td>60.44</td>
<td>60.44</td>
<td>60.44</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>137</td>
<td>27.51</td>
<td>27.51</td>
<td>87.95</td>
</tr>
<tr>
<td>Professor</td>
<td>60</td>
<td>12.05</td>
<td>12.05</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>498</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source(s): SPSS Output

Table 3. Frequency and percentage of designation

Source(s): SPSS output

![Pie Chart showing the distribution of age](source)

Source(s): SPSS output

![Pie Chart showing numbers of respondents working in different types of institutions](source)
Chi-square (71.201 with df = 14) was expected due to the large sample size (N > 498), not detracting from the model’s validity (Hair et al., 2009; Kumar et al., 2023). Figure 5 shows the model test of the data.

### 4.3 Mediation and moderation analysis

The study assesses the mediating effect of BO between JD and organizational outcomes (H2) and the WE mediating role between JR and organizational outcomes (H3). The analysis’s findings demonstrated that (H2) BO and (H3) WE have a substantial indirect impact on organizational outcomes ($b = 0.053$, $t = 1.286$ and ($b = 0.083$, $t = 2.97$), respectively). Furthermore, the direct effect of JD on organizational outcome in the
The presence of BO was found insignificant ($b = -0.0139, p < 0.654$). Hence, BO fully mediated the affiliation between JD and organizational outcomes, whereas the direct effect of JR on organizational outcome in the presence of “WE” was found significant ($b = -0.099, p < 0.003$). Hence, WE partially mediated the relations (Llorens et al., 2007; Kar and Saur, 2014; Schaufeli, 2015; Beatrice van der Heijden, 2019; Luo and Lei, 2021). The only difference between these studies and our result is that in our study, WE works as a partial mediator between JR and organizational outcomes. The study also evaluated the
mediating effect of BO on the connection between JR and WE to further validate the JD-R model in the Indian context. The analysis suggests a substantial indirect effect of the impact of JR on WE (b = 0.091, t = 2.679), supporting H4. Additionally, it was determined that JR and WE had a direct affiliation in the presence of a mediator (b = −0.093, p = 0.007). As a result, the association between JR and “WE” was partially mediated by BO. The study extended their research to examine the moderation association of PE between JD and BO (H5) and JR and WE (H6). Results indicate that PE moderates the connection between 1) JD and BO (estimate = −0.102, S.E. = 0.034, CR = −2.968, p = 0.003) and 2) JR and WE (Estimate = 0.111, S.E. = 0.046, C.R. = 2.409, p = 0.016). Using regression coefficients to plot the graph (see Figures 6 and 7), which explained that PE acts as a moderator, reducing the positive connection between JD and BO and strengthening the positive connection between JR and WE. The study also looks at the moderating effects of various institutions and whether or not designation moderated the model. The data analysis suggests that chi-square differences are compared after constraining each path, and results indicate that hypotheses 9 and 10 are significant. However, we did not have enough support for hypotheses 11 and 12 to say that designation moderates the associations. The mediation and moderation analysis are shown in Table 6 and Table 7 respectively. Table 8 shows the moderating role of types of institutions and Table 9 presents the moderating effects of designation.

5. Discussion
The findings of this study provide valuable insights into the relationship between job demands, BO, WE and organizational outcomes in HEIs. The study revealed that BO fully mediates the relationship between JD and organizational outcomes, while WE partially mediate the relationship between JR and organizational outcomes. These findings highlight the importance of considering the role of BO and WE in understanding the impact of JD and resources on organizational outcomes. Organizations should prioritize strategies to reduce BO and enhance WE among teachers to improve overall organizational performance and outcomes. Additionally, the study found that PE moderates the relationship between job demands and BO, as well as the relationship between JD and WE. Implementing PE practices can mitigate the adverse effects of high JD and enhance the positive effects of JR on teacher

![Figure 6. The moderating role of PE between JD and Burnout](image-url)
well-being and performance. It emphasizes the need for educational institutions to value and prioritize PE characteristics as a crucial component of the educational process. However, the study did not find sufficient support for the moderation effects of different types of institutions and teacher designations. This indicates that the influence of institutional type and teacher designation on the relationships between JD, BO, WE and organizational outcomes may not be significant in the context of this study.

6. Managerial and societal implications
This study underscores the significance of PE in enhancing teacher well-being and job satisfaction, which in turn can improve performance outcomes in higher education institutions (HEIs) (Chen and Wang, 2021; Bakker and Demerouti, 2007, 2017). Administrators must prioritize teachers’ well-being, considering PE a critical element in
the educational process. PE fosters consistent teacher engagement (Beairsto, 2012) and enhances student focus and teacher job engagement (Kohn, 2008). Our research supports incorporating PE into the job demands-resources model to bolster WE and mitigate BO. Empirical evidence from our study confirms that PE can serve as a crucial factor in this theoretical framework. Moreover, teachers’ professional development and growth opportunities, central to PE, keep them actively engaged and contribute to their sense of achievement, measured by their students’ success (Darling-Hammond et al., 2017).

The societal implications are profound. Teachers are the cornerstone of a nation’s development, rendering impressive infrastructure and curriculum ineffective without their positive teaching approach (Parvez and Shakir, 2013). They are the most critical biological resource in educational institutions, pivotal for the advancement of all stakeholders, including the broader society (Adil and Khan, 2020).

In sum, teacher quality is paramount in higher education. Burnout and alienation from work due to excessive demands and insufficient resources undermine educators, the institution and its students. Addressing these challenges is essential for the ongoing discourse on teacher BO and engagement in HEIs.

7. Conclusions

According to the study, higher education institutions in India most frequently utilize the JD-R model of BO and “WE” by Bakker and Demerouti (2007). This methodology is ideal for

<table>
<thead>
<tr>
<th></th>
<th>Govt</th>
<th>P</th>
<th>Pvt</th>
<th>P</th>
<th>z-score</th>
</tr>
</thead>
<tbody>
<tr>
<td>BO ← PE</td>
<td>0.386</td>
<td>0.000</td>
<td>0.224</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>BO ← JD</td>
<td>0.481</td>
<td>0.000</td>
<td>0.288</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>WE ← JR</td>
<td>0.582</td>
<td>0.000</td>
<td>0.233</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>WE ← PE</td>
<td>0.206</td>
<td>0.043</td>
<td>0.125</td>
<td>0.026</td>
<td>0.000</td>
</tr>
<tr>
<td>OO ← BO</td>
<td>0.234</td>
<td>0.025</td>
<td>0.129</td>
<td>0.013</td>
<td>0.000</td>
</tr>
<tr>
<td>OO ← WE</td>
<td>0.415</td>
<td>0.000</td>
<td>0.415</td>
<td>0.000</td>
<td>0.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P</th>
<th>Govt. Aided Pvt</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BO ← PE</td>
<td>0.224</td>
<td>0.000</td>
<td>0.287</td>
<td>0.400</td>
</tr>
<tr>
<td>BO ← JD</td>
<td>0.288</td>
<td>0.000</td>
<td>0.361</td>
<td>0.284</td>
</tr>
<tr>
<td>WE ← JR</td>
<td>0.196</td>
<td>0.000</td>
<td>−0.047</td>
<td>0.772</td>
</tr>
<tr>
<td>WE ← PE</td>
<td>0.130</td>
<td>0.021</td>
<td>0.391</td>
<td>0.027</td>
</tr>
<tr>
<td>OO ← BO</td>
<td>0.129</td>
<td>0.013</td>
<td>0.138</td>
<td>0.257</td>
</tr>
<tr>
<td>OO ← WE</td>
<td>0.415</td>
<td>0.000</td>
<td>0.780</td>
<td>0.000</td>
</tr>
</tbody>
</table>

Table 8. Moderating role of types of institutions

Note(s): *** p-value <0.01; ** p-value <0.05; * p-value <0.10
Source(s): Author’s own work
measuring teacher BO and WE in higher education in India. Job expectations and WE are the most significant factors influencing teachers’ BO and WE. The current study offers a fresh understanding of the demand-resource model for teaching positions in higher education institutions and presents fresh suggestions for improving instructors’ job engagement. The PE strategy was added to the prevailing employment demand resource model, and the impact was evaluated in the context of HEIs. The study supports adopting a progressive educational strategy at HEIs as being necessary to keep teachers permanently engaged in their jobs. By adopting and testing the modified job demand-resource model, these findings should be implemented to satisfy teachers’ fundamental psychological needs and keep them actively engaged in their profession. The study comes to the further conclusion that BO and WE vary among various institutions in India. Teachers at private HEIs experience more BO than those at public and privately funded government institutions. Additionally, different designation levels experience BO at varying degrees. We may now conclude that our findings are significant for the ongoing discussions about teachers’ BO and job engagement.

### 8. Limitation and future research scope

Future studies can solve the research design’s limitations. First, although student-level variables were not included in our present model, we considered instructors’ opinions of PE since they may influence teacher BO, WE and PE. Therefore, to assess moderating effects in future studies, longitudinal or hierarchical linear models should be used in the future. A significant academic step in further research would be to link PE to outcomes (such as students’ academic engagement), teacher-student relationships, or teacher performance outcomes. One potential limitation is the use of self-reported data, which may be subject to
bias and social desirability effects (Podsakoff et al., 2003). Another limitation is the generalizability of our findings to other contexts. Our study was conducted in HEIs in India, and the results may not be applicable to other countries or educational contexts (Kim et al., 2019). Understanding the advantages of PE in the Indian environment for both the givers and the receivers (teachers in the current study) would be another issue for future research (colleagues and higher educational institution principals). Additionally, validating the research approach in different kinds of schools, colleges and teachers would enhance the findings as the study was done among teachers at HEIs.

References


Kohn, A. (2015), “Progressive education: why it’s hard to beat, but also hard to find”.


Further reading


About the authors
Rupesh Rajak is currently working as an Assistant Professor at Symbiosis Law School, Symbiosis International University, Hyderabad, India.

Binod Rajak is currently working as an Assistant Professor at Innovation and Creativity Management, Department of Management Studies, NALSAR University of Law, Justice City, Shameerpet Hyderabad, Telangana, India. Previously, he has served at Lovely Professional University in the Department of Mittal School of Business. He holds a PhD from School of Management Studies, University of Hyderabad, India. He did Master in Personnel Management and Industrial Relation and Master of Commerce. He has published many articles in international peer-reviewed journals and his area of study is Human Resource Management, Organizational Behaviour, Organizational Psychology.

Vimal Kumar is an Assistant Professor at Chaoyang University of Technology, Taichung, Taiwan (R.O.C.) in the Department of Information Management. He completed his Postdoctoral Research at Chaoyang University of Technology, Taichung, Taiwan (R.O.C.) in the Department of Business Administration in the domain of Technological Innovation and Patent Analysis. He has served as an Assistant Professor under TEQIP III, an initiative of MHRD, Govt. of India at Assam Engineering College (AEC) Guwahati in the Department of Industrial and Production Engineering. Prior to joining AEC, he served as Assistant Professor at MANIT, Bhopal in the Department of Management Studies and also served as Visiting Faculty at IMT Nagpur. He obtained his PhD in the domain of TQM and Manufacturing Strategy in the year 2017 and Masters in Supply Chain Management from the Department of Industrial and Management Engineering, IIT Kanpur in the year 2012. He graduated (B.Tech) in Manufacturing Technology from Jagadguru Sri Shivarathreeshwara (JSS) Academy of Technical Education Noida, in the year 2010. He has published eighty-one articles in reputable international journals, nine book chapters and presented twenty-five papers at international conferences. His research paper entitled “Time Table Scheduling for Educational Sector on an E-Governance Platform: A Solution from an Analytics Company” has been selected for best paper award at the International Conference on Industrial Engineering and Operations Management (IEOM) held in Bandung, Indonesia, March 6–8, 2018. He was also invited to serve as session chair of session on “Energy Related Awareness” held on 19th September, 2018 at iCAST 2018, IEEE International Conference on Awareness Science and Technology and “Lean Six Sigma” at the International Conference on Industrial Engineering and Operations Management (IEOM-2018) at Bandung, Indonesia and “Quality Control and Management” at the International Conference on Industrial Engineering and Operations Management (IEOM-2016) at Kuala Lumpur, Malaysia. He has been appointed as an editorial board member in the IEEE-TEMS Journal from 1 January 2022 to 31 December 2024. He is a contributing author in international journals including Journal of Informetrics, Technology in Society, CLSCN, Supply Chain Management: An International Journal, IJOA, IEEE, BSE, TFSC, JKM, CSREM, IJIPM, IJQRM, IJPMB, IJPQM, IJBIS, AJOR, The TQM Journal and Benchmarking: An International Journal, etc. and also a guest reviewer of a reputable journal like IEEE-TEMS, JOI, IJPPM, IJQRM, TQM & Business Excellence, The TQM Journal, Benchmarking: An International Journal, Journal of Asia Business Studies and JSIT. Vimal Kumar is the corresponding author and can be contacted at: vimaljss91@gmail.com

Swati Mathur is currently working as an Assistant Professor at the Department of Management, Institute of Public Enterprise, Hyderabad, Telangana, India.

For instructions on how to order reprints of this article, please visit our website:
www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldinsight.com