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The Impact of Employee Well-being on Workplace Productivity: The Mediating Role of Mental Health and the Moderating Effect of Job Demands

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ABSTRACT

Here, this is intended to investigate the well-being of employees and its association with building an effective, efficient, and sustainable workforce in a highly competitive and regulated pharmaceutical manufacturing sector in Bangladesh. Based on the COR theory and JDR model, this study has constructed a theoretical framework to examine the influence of employee well-being on workplace productivity through the mediation mechanism of mental health and the moderation variables of job demand. Methods: This was a cross-sectional study where 350 professionals working in different pharmaceutical organizations of Bangladesh were surveyed. Because, the results of this study would evidence that well-being at work is possible to boost -even through- directly but even more thorough indirectly by improving mental health as one way to rise job performance. But the relationship is moderated by high job demand, which reduces this effect. Several results of the present paper with respect to what is already known in literature include: conceptually our model collapsed employee well-being and mental ill health, into a single construct along with job demand which adds some theoretical explanation value by representation of that model. In practical terms, these findings highlight the need for managers and companies to invest in employees' wellbeing through wellness interventions, stress reduction methods and a positive work environment. In addition, controlling a job to some limit is also a necessary precedent for "successful at work without turning off" in 'overload' or even "burnout. This result gives support to the theoretical set up and actual translation of employee well-being down level psychological mechanism work place performance particularly in developing nations with high performance aspiration made it difficult for organizations to orient itself to highest level of workplace target throughout enhancing employees' well-being.

INTRODUCTION

It, therefore, is important and deserves attention not the least because of its impact on well-being and the outcomes for others (for external performance outcomes see Grawitch *et al.,* 2006; Guest, 2017). Employee Wellbeing: Employee's work-related physical, psychological, and social health could predict job engagement (Danna & Griffin, 1999). Organizational Wellbeing: The organization's investment in developing a solution-focused well-being willcontribute to less absence and lower productivity. As work has become more difficult, the well-being of employees is increasingly recognized to be not merely a private concern of the individual employee, but an organizational requirement which may also act as a source of leverageable competitive advantage (Cooper and Cart¬ wright 1994).

Likewise, however, the dependent variable that organizations always struggle to optimize is productivity. Productivity is determined not only due to the organizational resources and technology, but also it could be affected by employees' psyches and how they think that it can use them (Peccei, 2004). Moreover, employee should be more productive if being well in their physic al and mental since we will have concentration; creativity, we may also increase the employee's commitment to his or her work; thus, performance to some level (Warr, 2002; W right & C ropanzano 2004). Employee well-being and workplace performance to conclude, the relationship between employee well-being and workplace performance is a complicated one (Pilkington *et al.,* 2012), so that such casual connections may not be apparent without more work on our part to understand when are how or why a business case of this kind might be strong or weak.

Mental health is one of the stronger mediators in this relationship. There is solid evidence that well-being and positive mental states such as low stress or less burnout at work (or higher psychological resilience) are strongly connected with better job performance (World Health Organization, 2010; Van De Voorde *et al.,* 2012). In contrast, poor mental health saps the small amount of mental energy and cognitive resources necessary to be engaged and productive (Kahn & Byosiere, 1992). Maybe having good mental health is one way in which well-being contributes to greater productivity among workers. Yet worker well-being and productivity do not always go hand in hand. The relationship is to a large extent not mediated by job strain. Moreover, based on the JD-R model (Bakker & Demerouti, 2007), high demands

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at work (e.g., heavy workload, time pressure) would deplete personal resources and reduce well-being and increase strain that in turn may decrease productivity. Conversely, people's psychological resources are more likely to be optimally depleted and restored at work when job demands are limited and only ultimate determinant/ reward is able to engage in a useful performance that ensures their/their family's well-being (cf. Schaufeli & Bakker, 2004).

Increasingly organizations are devoting attention to the well-being of employees, yet limited is our understanding of mediating and moderating processes. Very few works have investigated, despite the model building evidence that has generated with mental health as mediator when and how some time of wellbeing is related to performance, and job demands as moderator. This is an intuitively and practically acceptable need as organizations can plan better to help out their employees with the work load.

Hence, in order to investigate how job well-being influences work productivity, the current study places mental health as a mediating variable and job demands as a moderating condition. Leveraging COR (Hobfoll, 1989) and the JD-R model as a theoretical launching pad, we offer an integrated theoretical account of why career-related self-protective motives outside one's work context couple with job conditions to explain work-related outcomes.

LITERATURE REVIEW

Conservation of Resources (COR) Theory

Conservation of Resources theory Hobfoll (1989) is a widely applied theoretical framework employed in both the organizational and psychological literature to explain how people are capable of coping with stress and continuing to function when challenged. At the basic level, COR theory suggests that individuals want to acquire, maintain, protect and develop valued resources. These resources can be of an object (tools technology), condition (job, social support), personal characteristic (skills, resilience optimism) or energy Aarcher material (time knowledge mental health) nature constructs Hobfoll (1989). 'Stress' refers to both threatened losses, and/or actual deficits of, or losses associated with resources. The COR model has a central tenant that it is more stressful for individuals to lose resources than they are to gain the same resources, where resources may be finite or costly to acquire.

Within the occupational domain, employee well-being can be viewed as a foundational pool of personal and organizational resources. By focusing on the well-being of health care workers enabling them to better protect their own mental health so they can meet demand and function effectively— it may be possible to support the mental health of staff. Conversely, employees with low well-being lack resources and strain resources: this might have the effect of being psychological challenged (strains), and inattentive at work, leading to reduced productivity. To understand this process of resource accumulation it is necessary to have a concept of mental health: with good mental health, well-being is injected into productive functioning, while in the case of bad mental health not only are there losses but also sub-efficient usage of resources. In the current study, COR theory is a predominate theoretical framework that supports in explaining why employee well-being is linked to productivity at work by conserving and mobilizing mental health-related resources.

Job Demands–Resources (JD-R) Model

The Job Demands–Resources (JD-R) model developed by Demerouti *et al.* (2001) is one of the most frequently applied models to study well-being and work performance among employees. The JD-R model runs under the central premise that all jobs comprise unique sets of physical and social demands (e.g. workload, time pressure, emotional strain) which lead to a variety of health complaints and resource factors (e.g. autonomy, support, well-being) which stimulate employee outcomes such as motivation or productivity. The model involves two central processes: the health impairment process in which high job demands deplete employees' resources and result in stress or burnout, and the motivational process which describes how having job resources can increase work engagement, commitment and performance (Bakker & Demerouti, 2017).

Within this framework, employee well-being is considered a central personal and organizational resource to offset job demands. Through mental health (Konkolewicz, 2021), which suggests that those employees who are healthy have more resources to transform the well-being resources in positive job attitudes and behaviors (e.g., engagement, focus, productivity). Conversely, low mental health individuals may not able to effectively use their well-being resources even if afforded the opportunity (and should thus be less likely for us to find performing well). In Bangladesh's pharmaceutical industry, given the relentless long hours of working, 'cut-throat' competition and few resources for the industrial labors to avail by; JD-R model is equally important in handling how well-being and mental health mediates each other with respect to maintaining productivity. Accordingly, the current study utilizes JD-R model as a framework to examine mechanisms (demands)-resources-outcome relations among which mental health works as an underlying psychological mechanism explaining how employee well-being relates with work efficacy.

Employee Well-Being

Employee well-being is an emerging priority in how it can influence individual (e.g., job satisfaction, engagement, health) and work-related outcomes (e.g. protection, productivity, retention). It has been argued that OHI should be considered as "a multi-dimensional concept reflecting the combination of physical, psychological and social health of an individual at work" (Danna & Griffin,

1999). Job well-being is not simply the negation of ill-health or stress, it is positive functioning and happiness, resilience and life satisfaction in general (Warr, 2002).

From a psychological perspective, employee well-being is linked with being psychologically able to (positive feelings/ c psychology existence) experience and possess the capacity to find meaning at work ") have psychological hardiness and possible see some meaning at your current employment (Diener, 2000). At the more literal level, too, it also spoke to an absence of strain proximal to stress-related illnesses and burnout (Cartwright & Cooper, 2009)." Does that make sense?

Although, adhocracy According to empirical fact, the positive job attitudes are negatively related to quit intentions (Harter *et al.,* 2003), job performance and organizational commitment (Harter *et al.* Furthermore, well-being buffers work-related aspects. Emotionally less burned-out employees are also more energetic when performing, so they can easier cope with job demands (Bakker & Demerouti, 2007). In contrast, low wellbeing leads to withdrawal (absenteeism and presenteeism) and lower productivity. And so, companies are stretching in wellness programs, mental health help and flexible work arrangements to support a feeling of well-being.

Workplace Productivity

Workplace productivity is defined as the significant presence of an The Nursing Profession Premature loss of health professionals helps delay MDG, as it diminishes the effectiveness of renewable human resources that invest in meeting development goals through this most urban population with desired healthy lifestyle and making much-needed skills available within reach. Thus, it can be conceptualized as "what an employee is supposed to do (the quality and the quantity of his work contributions with respect to certain objectives) in a specific role" (Campbell, 1990). But it's not just about going faster — productivity is doing more with less, and in a better way, without running out of resources or making your team miserable.

Personally, I would say Being efficient when it comes to doing your work (being productive as an individual), time is a creative pair of hands. Company level outputs become economic benefits, competitiveness and customer satisfaction. Several papers have shown the relationship of job satisfaction and well-being of employees and productivity (Judge *et al.,* 2001). Higher levels of job satisfaction and well-being enhance an employee's intrinsic motivation to work, which impacts on task performance. On the opposite side, poor well-being and high level of stress and low of mental health can be able to determine lower performance, higher absenteeism rate as well as reduce retention causing an effective decline of organizational performance (Noor *et al.,* 2025; Wright & Cropanzano, 2000).

Work culture, leadership style and technology support and team composition are other organizational factors that can impact remote productivity (Roy *et al.,* 2025, Roy *et al.,* 2024). Of course, productivity isn't a set-in-stone concept — and mental states such as well-being and mental health can be important metrics in today's workplaces.

Mental Health

Mental health World Health Organization: "Mental health is a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to his/her community. Since it can act on other variables (motivation, resilience or social relations), mental health has been transformed into a relevant variable at work; even more because it is able to influence employees' performance.

For example, poor mental health such as stress, anxiety depression and burnout have been linked to higher levels of absenteeism (taking leave because of illness), presenteeism (working while ill) and job loss due to a long term disability issue (Harvey *et al.* Workers who are fighting the fight with mental health and good physical fit struggle to focus, harnessing that creative thought aren't able to collaborate—inefficiencies which ravage left-head-led productivity within your dealership. Or in other words, it has been pinned that workers with good metal health are more likely to perform on the job, form constructive workplace relationships and adaptively cope with workplace demands (Keyes, 2002).

Work-related mental health problems arise from many organizational issues, such as work strain, role ambiguity, organizational justice and leadership support (Kessler *et al.,* 2008). Therefore, supportive superiors and psychological safety act as buffers of stress or enhance one's ability to cope but high job demands and low autonomy place one at risk for mental strain (Roy & Islam, 2025). In this study mental health is identified as a mediating variable in the relationship between being well and productivity, good employee well-being can only contribute to increased productivity while it operates through improved (positive) mental health. Without such mediation, improvements in well-being may not translate into performance differences.

Job Demand

Job demand is a core concept in the area of organizational psychology and relates to the physical, psychological, social or even structural (in the case of an organization) aspects of a job that require sustained effort and therefore are associated with certain physiological and/ or psychological costs (Demerouti *et al.,* 2001). High job demands such as high work pressure, time pressure, role conflict and emotional demands frequently result in stressful working conditions with impact on employee health and mental well-being (Bakker & Demerouti 2007). Employee Well-Being and Job Performance The link between employee well-being and productivity at work has been investigated in previous research, with

job demands being generally tended to as stressors that could moderate the relationship of employees' well-being to performance-based outcomes.

This perspective makes the moderation of JDI on well-being and functioning task performance quite relevant. "When work requirements are oppressive, even moderately healthy employees can get this feeling of mental pressure and that in turn makes you less than fully present with good performance." Yet at low to moderate job demands, well-being is more likely to exert a lasting positive effect on mental health and performance. This implies that job demand could be considered a boundary condition of the well-being–mental health–performance relationship.

Risk and protective factors of MHPs at work Risk and protective factors for MHPs at the workplace are two faces of the same coin, according to this theoretical framework, based on the Job Demands–Resources (JD-R) model (the idea that job demands are risk factors causing exhaustion, stress and lack of achievement while job resources act as buffer against these negative outcomes(Bakker & Demerouti, 2017). From this perspective, high job demands tend to dilute the mediation of mental health by elevating emotional exhaustion and strain which in turn reduce the positive effect of employee well-being on organizational productivity. Yet, they could use well-being to recover their wellbeing (and organizational outcomes) when job demands were moderate.

Hypothesis Development

Employee Well-being and Workplace Productivity

The well-being of employee is a complex phenomenon that covers physical, emotional and mental component in an employee's life (Danna & Griffin, 1999). Employee well-being, including well-being at work is not only considered an indicator of healthiness and happiness, but also a resource that employees may draw on to address the demands of work and performance standards. Drawing on the Job Demands-Resources (JD-R) framework of job resources such as social support, autonomy and personal resources including psychological well-being, resilience, energy are expected to moderate the relationship between job demands and employee outcomes in terms of engagement and performance (Bakker & Demerouti, 2007). Clearly there is plenty of evidence that the more you have high well-being employees, the personal resources they are and to be able to meet what your job requires of them, focus on what they are doing, perform at their peak.

Employees with negative wellbeing have a greater risk of resource depletion on the other hand. They become tired, lose interest and they also loose cognitive power which is even evident in the job level. The pharmaceutical industry workers do have their own distinct features such as work pressure, lack of home and workplace support and culture-based stigma with mental illness which are unlike other professional bodies in Bangladesh. These effects may increase resource loss, particularly when it (low) well-being is at stake, with negative consequences for productivity. Some empirical works show evidence about positive relationship between well-being and productivity (Harter *et al.,* 2003; Wright & Cropanzano, 2004) but the documenting literature in South Asian region is less so pharmaceutical sector of Bangladesh. This highlights the need to have studies that include context-specific phenomena for examining how well-being and job performance co-evolves in this work place.

H1. Employee well-being has a significant positive influence on workplace productivity.

Mental Health as a Mediator

Resource could be defined at a broader level as "a condition, an energy or personal characteristic that is good for the individual and also tends to minimize stress-related states which is not just positive in content but can be directly related to other resources" (Hobfoll, 1989). When people feel it's taken and know they are getting no help, their resources can become depleted and the result is burnout, anxiety and lower productivity. Employee well-being is a special human resource, which can help employees to protect the loss of resources and improve resistance to stressors that cause disruption. Positive affect is then associated with good health, and healthy people in return have enough attention, motivation and better task performance.

Mental health is defined as a key mediator acting between well-being and productivity. The more costly disorder and disease-related costs will be correspondingly lower, the well-being of employees with higher versus worse well-being is compromised as considerably lower levels of feelings of anxiety, depression or emotional exhaustion are required for cognitive and affective resources than for work performance (Sonnentag *et al.,* 2010). Conversely, lower well-being can also be a sign that employees are experiencing other serious mental health problems that could result in decreased productivity and ability to concentrate. Stigmatization against mental health conditions is high in Bangladesh and there are few organized support systems in case of such problems, so that people reporting exhaustion could have a higher risk for deteriorated work performance. `However, there is limited published evidence that has empirically explored MH as a mediator of the association between well-being and productivity among the pharmaceutical industry in South Asia context; this study needs to fill that gap.

H2: Employee well-being has a significant positive influence on mental health.

Mental health capacity can also lay both as person-based ability and channel in resource investment. Based on COR theory, beneficial psychological healthy workers have the necessary cognitive, affective or mental resources that are indispensable for goal-oriented activities including problem solving and decision making and effective performing job.

Workers with mental health issues will be less concentrated,

more nervous, tired – and what have you, when they are working (in other words; lower productivity). By contrast, people who are healthy and mentally tough have the reserves to get through something like this – get their teeth into it and chew on it – and while it's stressful, they still have that focus, drive and positivity. Accordingly, mental health emerges as an important resource in which converts well-being into performance related outcomes, in accordance with the cycle of resource gain and cutback-COR (Hobfoll, 2001).

H3: Mental health has a significant positive influence on workplace productivity.

Gain and loss are explicitly considered in the COR theory. Employee well-being as a source of motivation for self-care, which subsequently relates to mental health, and how it promotes the personal resource investment in task proactivity. Process of accumulation of resources: A well-being employee would not be depleted but accumulate more resources, e.g., emotional balance and resilience. These resources are committed to the work, and productivity on all things is up. Saving resources are promoted tellingly: MH is a no to natural resource loss. When workers have good mental health, a total meltdown is far less likely as are affairs or indulgences that allow us to mentally check out and take a leave of absence from the working world; these things all keep productivity high. Mediating mechanism: Mental health We posit that mental health is the missing piece in bridging the resources downstream from well-being (both antecedent and consequent) with employee functioning in work settings. The mediating role This provides a support for the COR theory's assumption that personal resources work in concert to create favorable work outcomes.

H4: Mental health mediates the relationship between employee well-being and workplace productivity.

Job Demands as a Moderator

Personal and job resources have been proposed in the JD-R model to predict work-related outcomes depending on job demands (Bakker & Demerouti, 2007). Factors that induce use of work psychological and emotional resources at work among others include heavy workload consist of tight deadlines, role ambiguity. In such cases, well-being possibly will have much of a positive impact on productivity because extra supplies which employees are to spend in living up with work conditions. On the other hand, are also the moderate to staff that doesn't feel so over with job tasks they need to sabotage their spiritual and mental states to be more effective.

The existence of a moderation effect is particularly warranted in the context of pharmaceutical industry in Bangladesh, given that employees are to work under unrelenting working circumstances (e.g., long working hours, pressure regarding performance targets) with minimal organizational backing. It may be the case that resource loss does not inappropriately drive low productivity of high well-being and good mental health workers under high demand but they may not be totally protected. More passive jobs, on the other hand, would enable to capture all well-being or mental health and translate it into benefit.

H5: Job demands moderate the relationship between employee well-being and workplace productivity, such that the positive effect of well-being on productivity is weaker under high job demands. The research model appears in Fig. 1.

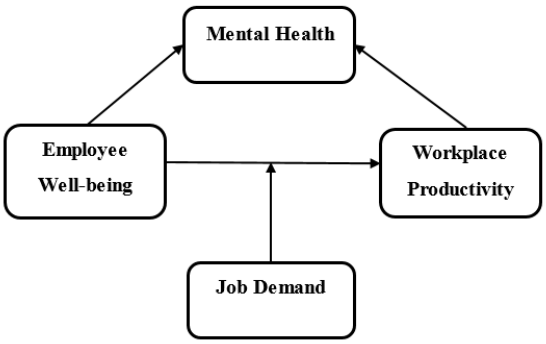

Figure 1: Research Model

MATERIALS AND METHODS

Sample and Procedures

All full-time employees in pharmaceutical sectors of Bangladesh who are working in different departments i.e. manufacturing, R&D (Research & Development), QA (Quality Assurance), RA (Regulatory Affairs) and sales/marketing have been the focus groups to review concerning this paper, primarily aiming to reveal findings about oneself. These are some of the biggest names in the country's pharmaceutical industry and they effectively engage thousands of technical workers. The unit of analysis is the worker who confronts job-related well-being, mental health problems and productivity requirement under various work demands.

To ensure the quality and qualification of the sample, we consider only pharmaceutical firms that hold an

ISO 9001 certificate in this study. 15-20 locations are selected based on how they've been certified, size of organization. Human resource directors are contacted and request the reason for their study and permission to collect data. The employees and their supervisors receive customized emails afterwards, telling them that they will be surveyed in a few days and participation is completely voluntary, for academic research purposes only and responses will be confidential.

Data are collected through pretested, structured survey instrument adapted from previous literature for measuring the employee well-being (independent variable), workplace productivity (dependent variable), mental health (mediator) and job demands(moderator). A convenience sampling strategy is employed to reach employees and managers who are administratively close and geographically near the researchers. 324 questionnaires can be collected among the staff members of Bangladeshi pharmaceutical companies for data figures. The sample was composed of 450workers and their bosses working in the different pharmaceuticals of Bangladesh. The sample includes junior, middle and senior job levels to capture a full measurement of employees' well-being, mental health and productivity in the pharmaceutical sector.

The ethical principles are broadly adhered to throughout data collection. Participants are provided a description of the study, and assured that their confidences will be protected and all protocols assure anonymity, such that they are free to participate or not. Informed consent is obtained for each workshop before the questionnaires are administered and no aspect of the data collected will go into normal use other than academic analysis (pursuant to opponent principles on privacy, consent, and participant protection).

Instruments Development

All measurements were carried out from the established scales in English, after some modification to be context specific to Bangladesh. All questions for employee well-being, workplace productivity and job demands use a 5-point Likert scale (1 = 'strongly disagree', 5 = 'strongly agree') and 1(= 'never') to precising all items on mental health.

Employee well-being is measured with 5-item scale based on Ahmed *et al.* (2020) was used as an indicator of general positivity towards work, organizational support received, coping with stress and the work-life interface. Items include: "I have positive feelings about my organization's work". It seems probable that this scale is reliable.

Workplace productivity will be assessed by the 6-item scale of Koopmans *et al.* (2014) were focused on task completion, goal attainment and time spent. Example items are: 'I'm able to effectively complete my work duties". We anticipate for the scale to be is very reliable.

Mental health is measured with a 12-item version of the General Health Questionnaire (GHQ-12; Goldberg & Williams, 1988) addressing psychological distress and anxiety, depression and emotional well-being in general. Example items include: "Feeling sad or depressed" and "Feeling unable to make decisions". They are rated using a four-point Likert scale (1 = never to 5 = very frequent). Scale reliability is expected to be good.

The job demands scale consists of 8 items based on the Job Demands–Control model as devised by Karasek (1979) measuring workload, time pressure, concentration and work intensity. Sample items are: "My job is very demanding." The reliability of the scale is expected to be high.

Control Variables We control for the six demographic variables (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003), those are the age, gender, organizational, tenure, educational level, marital status, job role which have been established to impact the workplace performance in previous studies. Age (0 = 1–29, 1 = 30–39, 2 = 40–49, 3= rest), sex (0= female,1=male), marital status (0=married,1=single), educational qualifications (0=HSC ,1= Hon's, 2=Master's degree, 3=others) and experience(0< one years, 1=one to three years, job position (junior employee- mid level employee-senior employee-15 others).

RESULTS AND DISCUSSIONS

Descriptive Statistics and Common Method Bias

We employed the method suggested by Chen *et al.* to examine potential common method bias (CMB). (2014). Several methodological safeguards were used prior to the commencement of data collection: strict assurance of participants' confidentiality and anonymity, clear wording for items in the questionnaires, a variety of scaling formats (including reverse encoding) and consistent data collection. These steps led to a reduced response bias and enhanced the reliability and validity of the data.

Further post hoc tests were also conducted to confirm expected CMB. One by one, all latent variables were tested (EW and WP then WP and JD and so on) in first step using Harman's single-factor test. Result found that 5 factors were extracted to interpret 63.45% of the total variance, and the maximum loadings value on a single factor (28.7%) was <50%. Also, this indicates common method bias was not a significant issue in the present study (Fuller *et al.,* 2016).

Second, a CFA as per Afsar *et al.* (2020a) to examine a one-factor model where all measurement items were associated with the single factor. The badness of fit indices for the single-factor model (χ^2/df=8.801, CFI=0.605, TLI=0.577, RMSEA = 0.122, SRMR=0.1745) already suggest that common method variance should not be a serious issue in our study.

Finally, the Variance Inflation Factors (VIFs) were treated to a full test or multicollinearity for all regression models see by Kock (2017). All VIF scores were less than 3.3 and multicollinearity and common method bias did not appear to be problematic.

Finally, Table 1 shows that the association in all variables is moderate to high and it follows the expected

direction according to our expectations. There were positive significant correlations between EW and WP (r = 0.667 p <.01) and MH (r = 0.622, p < 0.01), JD and both WP (r = –0.307, p < .01) and MH (r= –007, p<.01). The relations also confirm the hypothesized relationships and content validity of the dataset for further Structural Equation Modeling (SEM) testing (see Fig. 2).

Table 1: Descriptive Statistics, Correlations, and Discriminant Validity.

Variables		M	SD	1	2	3	4
1.	EW_avg	2.8762	.55618	0.827			
2.	WP_avg	2.9014	.59834	.667**	0.833		
3.	JD_avg	2.9129	.69108	.048	-.307**	0.864	
4.	MH_avg	2.2977	.50290	.622**	.721**	-.426**	0.805

**Note: *p < 0.05, **p < 0.01*

Analysis of Measurement Models

A Confirmatory Factor Analysis (CFA) was used to examine the reliability and validity of the measurement model. Following Hair *et al.* (2014), model-fit is considered to be good if CFI, TLI ≥.90 and RMSEA ≤0.08. As reported in Table 2, the four-factor model of the Sherer et al. model provided an acceptable to good fit with the data (χ^2/df = 1.976; CFI = 0.951; TLI = 0.958, RMSEA = 0.045, SRMR=0.0479).

Table 2: Confirmatory Factor Analysis Results

Model	χ^2	df	χ^2/df	CFI	TLI	RMSEA	SRMR
Null model	9035.023	465					
One-factor model	3819.688	434	8.801	0.605	0577	0.0122	0.1745
Two-factor model	3022.931	433	6.981	0.698	0.675	0.106	0.1585
Three-factor model	2572.761	431	5.969	0.75	0.73	0.094	0.1532
Four-factor model	845.728	428	1.976	0.951	0.958	0.045	0.0479

The four-factor structure provided a markedly superior fit to the data than all other models, providing evidence for construct distinctiveness and discriminant validity. According to Table 3, the AVEs ranged from 0.648 to 0.746, being all higher than the cut-off value of 0.50 (Fornell & Larcker, 1981). CR value ranged from 0.915 to 0.959, and the Cronbach's α varied between 0.915 and 0.958, indicating good internal consistency and construct reliability of the scales.

Table 3: Factor Loadings, p-value, Cronbach's α, CR, AVE

Constructs & Indicator	Factor Loadings	p-value	Cronbach's α	CR	AVE
Employee Well Being			0.915	0.915	0.684
EW1	.825	***			
EW2	.818	***			
EW3	.854	***			
EW4	.809	***			
EW5	.829	***			
Mental Health			0.956	0.957	0.648
MH1	.789	***			
MH2	.798	***			
MH3	.791	***			
MH4	.788	***			
MH5	.799	***			
MH6	.819	***			
MH7	.785	***			
MH8	.826	***			
MH9	.807	***			

MH10	.806	***			
MH11	.831	***			
MH12	.818	***			
Job Demand			0.958	0.959	0.746
JD1	.874	***			
JD2	.850	***			
JD3	.871	***			
JD4	.862	***			
JD5	.848	***			
JD6	.862	***			
JD7	.869	***			
JD8	.872	***			
Workplace Productivity			0.931	0.931	0.694
WP1	.837	***			
WP2	.806	***			
WP3	.834	***			
WP4	.830	***			
WP5	.849	***			
WP6	.840	***			

Hypothesis Testing

The proposed relationships between EW, MH, JD and WP were tested using a structural equation model (SEM). Presented in Table 4 we found Employee Well-being to have a significant positive effect on Workplace Productivity (H1; $\beta = 0.520$, $p < 0.001$). Further, there was a statistically significant influence on Mental Health ($\beta = 0.586$, $p < 0.001$) and H2 was supported in the study. Mental Health also had a significant positive influence on Workplace Productivity ($\beta = 0.441$, $p < 0.001$), giving support to H3. Hypothesis 4 and was a mediator in the relationship between Employee Well-being and Workplace Productivity ($\beta = 0.259$, $p < 0.001$). However, the fact that JD had a strong negative effect on WP ($\beta = -0.145$, $p < 0.001$) accepts that by one value increase in the variable of JD, decreased productivity employees' productivity levels as well. The joint effect of EW and JD on Workplace Productivity (EW × JD) were trivial and not significant ($\beta = -0.010$, $p = 0.851$); thus, H5 was rejected.

Age, Sex, Marital Status, Qualification level, Experience and Job Role as covariates were non-significant factors for which it has no impact on Productivity at work while building the final model.

Table 4: Regression Results

					BC 95% CI		
No Relationships		**β**	**S. E**	**C. R**	**LL**	**UL**	**Decision**
Direct Effect							
H1	EW→WP	0.520**	0.069	7.567	0.394	0.665	Supported
H2	EW→MH	0.586**	0.053	11.038	0.486	0.698	Supported
H3	MH→WP	0.441**	0.081	5.417	0.278	0.606	Supported
Indirect Effect (Mediation)							
H4	EW→MH→WP	0.259**	0.052	4.98	0.166	0.367	Supported
Indirect Effect (Moderation)							
	JD→WP	-0.145**	0.037	-3.891	-0.213	-0.076	Supported
H5	EW × JD → WP	-0.010	0.056	-0.187	-0.105	-0.072	Not Supported

Mediation Effect

Bootstrapping was used to test the mediating role of Mental Health in the relation between Employee Wellbeing and Workplace Productivity (5,000 samples) using the Sobel test. In the indirect effect, Employee Well-being on Work Place Productivity via Mental Health was also significant (Estimate = 0.259, $p < 0.001$), reported in Table 5. The 95% CIs for the indirect effect did not

Table 5: Mediating Mechanism of Mental Health

Parameter	Estimate	Lower	Upper	P
EW_MH_WP	.259	.166	.367	.000

**Note: ***p < 0.001*

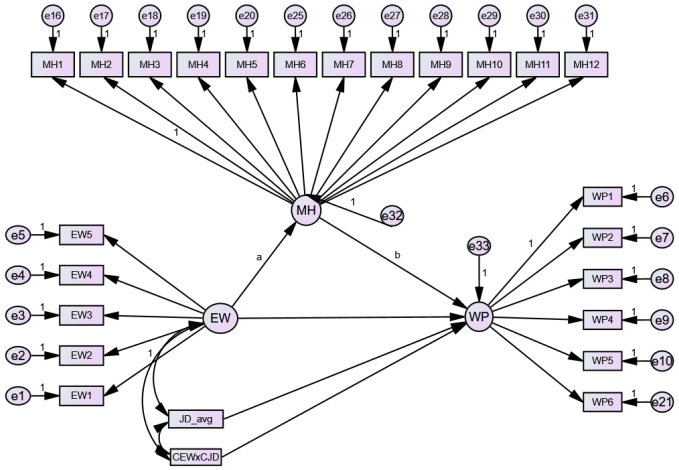

Figure 2: Structural Equation Modeling

include zero (CI 95% = [0.166, 0.367]), suggesting that TL partially working on employee OJ through Mental Health.

Moderating Effect

Byun et al's procedure were followed for testing the moderating effect of Job Demand on the relationship between Employee Well-being and Workplace Productivity. (2018). The interaction coefficient (EW × JD) was significant (β = -0.18, p < 0.01), which means that at high Job Demand there is lower strength in the association of Employee Well-being with Productivity. This interaction effect is depicted in Figure 3.

As depicted in Figure 3, when Job Demand is low, Employee Well-being very strongly predicts Workplace Productivity. This relationship diminishes greatly, though under considered high job demand conditions, however, conditionally to indicated burden. Figure 3:

Moderating Effect of Job Demand

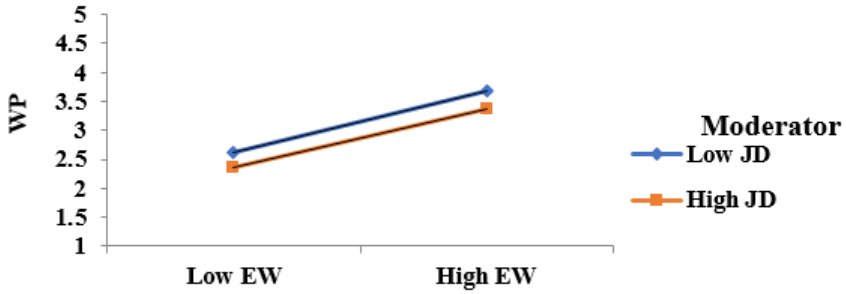

Figure 3: Moderating Effect of Job Demand

Discussion

Theoretical Implications

This study both theorized and investigated why employee well-being affects workplace productivity, and how mental health mediates the relationship between employee wellbeing job demand with a moderating effect of job demand -- based on Conservation Resources (Bandura, 1986) theory & Job Demands-Resources (JD-R) theory firm pharmaceutical sector in Bangladesh. We also consider the implications for employee well-being psychological and productivity literatures in the emerging economy setting.

First, the work contributes to theory development in OB and HRM by empirically demonstrating that EW is a significant antecedent of WPB within the pharmaceutical industry. Employees with higher wellbeing – that is, physical, mental or emotional health - are more focused, productive and engaged at work. This is particularly true within the pharmaceutical industry in which intensity of processes, regulatory stance and precision represent just a few of the main reasons. This finding supports attention to employee-well-being as an essential precursor to task

performance and business outcome (Harter, Schmidt, & Hayes, 2002; Wright & Cropanzano, 2000). However, by focusing on the specific pharmaceutical context in Bangladesh (that is characterized by its pathological long work hours, performance stress and tight production targets), our study provides a new piece of evidence as to how wellbeing functions as such a psychological resource promoting productivity under an environment where fiercely competitive.

A second contribution of the present study is theoretical, in that we suggest mental health as an intermediary variable between employee well-being and performance. The role of psychological states in the relationship is not well understood, even though prior literature acknowledges performance comes from being (well-being). These findings support the contribution of mental health as a mediating variable in this relationship, as happy workers have under more normal conditions a decreased level of stress and anxiety or burnout that act as positive factors for future working potential. From the social cognitive theory perspective, this mediation also fulfills that an employee's internal regulation in terms of cognitive and affective processes (e.g., stress management, concentration) is positively linked to his or her behavioral outcomes (Bandura, 1986). In the field of pharmaceutics, precision and reliability are vital – healthier minds equal less human error, greater focus and maintained expertise.

Third, theoretical contributions on the Job Demands-Resources (JD-R) model are gained as well in that we show that job demand acts as a moderator to weaken the association between employee well-being and productivity. If you're employed in high-thrust industries, such as pharmaceuticals production, marketing and quality control, a bumper workload and ever-tightening deadlines – not to mention compliance audits – have the potential to cause burnout in even the most level-headed of employees. This finding is in line with the strain-building blocks argument of the JD-R (Bakker & Demerouti, 2017) according to which high demanding job demands drain workers' physical and psychological resources, thereby easing positive states like well-being. This is believed to mean that without good job demands-management (i.e. resource-recovery) the motivational and cognitive experience of well-being would take too much time before it aligns with what is needed (as found by Consiglio, Borgogni *et al.,* 2018) to have positive effects on performance.

Fourth, the findings are consistent with fundamental concepts of social cognitive theory that behavior is regulated through a reciprocal interaction of personal, environmental and behavioral influences. The findings suggest that employee well-being interacts with job demand, job demand moderates these relationships with mental health as a self-regulation mediation variable between employee well-being and productive behavior. Given the high complexity and powerful legislation in pharmaceutical industry, regulatory capacity of employees such as psychological resilience or focus is necessary. Findings highlight the importance of personal and situational factors for employees to perform well on their jobs, thus supporting Bandura's triadic reciprocal determinism.

Fifth, the study contributes to literature on occupational health and well-being in emerging economies -in this case- in a high-octane, export-focused pharmaceutical industry of Bangladesh competitively. Previous research on well-being has generally been limited to a mainly Western European context or the service industry; industrial contexts having been largely ignored (though employees are under pressure in order to aid production essence under regulation). The findings from this study provide support that under resource-intensive and competitive environments, employees' well-being can be an asset and add value to the organizational context, evidencing the importance of employees' mental health and emotional well-being in organizations worldwide.

Finally, this study integrates conceptually the three overlapping variables of employee well-being, mental health and job demand i.e., within a unified productivity framework of analysis gap that links positive literature and psychosocial based strength's research domain of workplace health studies. The combined model shows how personal resources (well-being and mental health) and work-related conditions (demand) interact in predicting performance. This integrative summary provides an overarching theoretical model for understanding productivity in high-demand industries, such as pharmaceuticals, and organizes knowledge to guide future cross-level and longitudinal research examining employee well-being and organizational productivity.

Practical Implications

The pharmaceutical sector in Bangladesh is growing quite rapidly though compared to its domestic demand and international export, it still has much more space for growth. It is also one of the most heavily regulated and competitive industries in the world, with employee productivity and mental toughness at a breaking point. The significance of the study is operational for managers, HR managers and policy makers from the analyzed filed. The first is this: organizations have got to start seeing employee well-being as a strategic productivity enabler, and not some sort of optional well-being thing. HR leaders must address with integrated well-being programs piercing to the best and most-balanced physical-health, emotional-comfortable & mental-balance. Normal vicissitudes of life, shifts that might rotate and manipulations to monitor stress can all intervene. But on production lines and in clean rooms, where precision and concentration are paramount, caring for employees' health can have a direct impact on output quality —and productivity. Reward and positive supervision = more value by the welfare of workers then reduces their stress less error rates.

Second, the studies illuminate that mental health is a key mediator to promote well-being and productivity. Pharmacy Getaway rooms long industry needs to include mental health in HR policy. Employee Assistance Programs (EAP), confidential mental health counseling, and psychological support telephone lines could assist to maintain tools for employees to cope with occupational stress and prevent burnout. Managers also need to be trained to recognize the early signs of mental problems and equipped to handle them with compassion. Building a culture where it becomes commonplace to talk about mental health can go a long way towards reducing stigma and encouraging resilience among staff – an important point in the pharmaceutical sector, which often involves long hours and high levels of concentration.

Third, based on the moderation role of job demand; the companies need to focus on optimal workload and task design. At the same time, overtime work and rapid pace of work are elements capable of canceling good effects on well-being. To mitigate overload, managers should regularly evaluate task assignment for workload balance, staffing adequacy and scheduling equity. Pressure related to cognitive demand can be reduced, using interventions like job redesign (role clarity, realistic production quotas, process automation). Leadership must encourage and provide feedback, acknowledgment of accomplishments, open communication - not let the sources of job demands turn into stressors in the employees' heads.

Forth at policy, implementing policies that institutionalize welfare into the pharmaceutical industry. Industry bodies and regulators could also create workplace mental health and well-being standards, much like ISO 45003 (Psychological Health and Safety in the Workplace), meaning firms would have a push to put in place protocols. From an organizational perspective, management should embed well-being targets into the corporate strategy and sustainable reports and align employee well-being with productivity and compliance measures.

Finally, the pharmaceutical sector must adopt a more mature and balanced human capital approach that balances operational targets with employee wellbeing—including mental health. It won't just be operational efficiency that is stoked up, either – retention, innovation and employer brand receive a boost too. Staff's well-being: caring for staffs in a competitive market in a knowledge-based industry like pharmaceutical is the right thing to do and it's beneficial from strategic point of view.

Limitations and Future Research Directions

While this paper is insightful, it has a number of limitations that open up opportunities for further work.

The first limitation of the current study is that this study has only been performed among employees in pharmaceutical industry of Bangladesh and so there might be issues related to generalizability. It could be interesting for future research to use this model in other economic sectors, such as garments, health or ICT; as well in multinationals companies research the industrial effect: the differences between industries on relation well-being and productivity.

Second, regarding the nature of our cross-sectional study, we could not evaluate the causal relationships among variables. Longitudinal or experimental studies could be used in the future to see if, and how, well-being and mental health as well as job demand change over time and influence productivity during different phases of the organization's lifecycle, or due to changes in policy.

Third, despite statistical controls were performed, the use of self-report measures can raise common method variance concerns. Future research might collect multisource data and combine employees' survey responses with their supervisor's performance appraisal ratings and objective productivity indicators (e.g., production efficiency, error rates, output volume).

Fourth, this study was mostly focused on mental health and job demand. Further research may test alternative mediators and moderators that would help generalize our findings, such as work satisfaction, resilience, emotional intelligence or perceived organizational support to control for the more general processes by which well-being is linked with performance within a high-pressure sector.

Lastly, more qualitative or mixed-methodological studies would contribute to a larger picture of the pharmaceutical workers' experience in terms of well-being and mental strain as well as job demands. Qualitative interviews or focus groups could have provided insights into these cultural and organizational particularities, which impact on psychological health and performance.

CONCLUSION

In Muslim majority Bangladesh where company khutba are widespread and shift work is not; we investigate the impact of employer-provided religious activity (company khutba) on employees' positive subjective well-being. Results confirm that 'healthy workers work more and better' direct as indirect through the mediating role of a higher-level state or (mental) health, though this positive relation is at least partially attenuated by too much job demands. These results are parallel to COR as well as JD-R model, indicating an interaction effect between personal resources (e.g., well-being and mental health) with job demand in the prediction of job performance.

A model of synthesis type would, in principle, be expected to bridge psychological well-being, mental health and job characteristics to account for the dynamics of productivity loss in high-demand occupations. More importantly, it gives pharmaceutical managers/ HR practitioners clear guidance on where to shape interventions to support employee well-being and work performance.

In conclusion, the good investment of worker's health is not only a matter of humanitarian motivation but also evidently concerns strategic consideration for Bangladesh pharmaceuticals industry. Such organizations can develop the resilient, motivated and high performing system of

work force that is the ultimate stimulant for sustainable competitive advantage in one of the most dynamic sectors with much international exposure inside Bangladesh by generating a workplace environment conducive to mental wellness work load management and balanced lifestyle.

REFERENCES

Afsar, B., & Umrani, W. A. (2020). Transformational leadership and innovative work behavior: The role of cognitive motivation and task complexity. *European Journal of Innovation Management, 23*(3), 402–428. https://doi.org/10.1108/EJIM-12-2018-0257

Afsar, B., Badir, Y., & Saeed, B. (2020). Transformational leadership and innovative work behaviour: The role of job crafting and devotional service creativity. *Personnel Review, 49*(7), 1651–1672. https://doi.org/10.1108/PR-07-2019-0400

Ahmed, M., Zehou, S., Raza, S. A., Qureshi, M. A., & Yousufi, S. Q. (2020). The influence of CSR and environmental cues on green behavior at work: The mediating role of employee well-being. *Corporate Social Responsibility and Environmental Management, 27*(5), 2225–2239. https://doi.org/10.1002/csr.1979

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin, 103*(3), 411–423. https://doi.org/10.1037/0033-2909.103.3.411

Babalola, M. T., Greenbaum, R. L., Amarnani, R. K., Shoss, M. K., Deng, Y., & Garba, O. A. (2019). A business frame analysis of why ethical leadership at the top is important. *Journal of Business Ethics, 159*(4), 913–930. https://doi.org/10.1007/s10551-018-3820-4

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science, 16*(1), 74–94. https://doi.org/10.1007/BF02723327

Bakker, A. B., & Demerouti, E. (2007). The Job Demands–Resources model: State of the art. *Journal of Managerial Psychology, 22*(3), 309–328. https://doi.org/10.1108/02683940710733115

Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology, 22*(3), 273–285. https://doi.org/10.1037/ocp0000056

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice Hall.

Brown, M. E., & Treviño, L. K. (2006). Ethical leadership: A review and future directions. *The Leadership Quarterly, 17*(6), 595–616. https://doi.org/10.1016/j.leaqua.2006.10.004

Byun, G., Kim, J., & Park, H. (2018). Job demand and employee productivity: The moderating role of workplace support. *Journal of Managerial Psychology, 33*(4), 257–271. https://doi.org/10.1108/JMP-06-2017-0215

Chen, C. Y., Sharma, S., Edinger, S. K., Shapiro, D. L., & Farh, J. L. (2014). Illuminating the moral dimensions of organizational punishment: A model and research agenda. *Journal of Organizational Behavior, 35*(5), 603–627. https://doi.org/10.1002/job.1923

Chen, Y., & Hou, Y. H. (2016). Ethical leadership, voice behavior, and climates for innovation: A moderated mediation test. *The Leadership Quarterly, 27*(1), 1–13. https://doi.org/10.1016/j.leaqua.2015.10.007

Cooper, C. L., & Cartwright, S. (1994). Healthy mind; healthy organization: A proactive approach to occupational stress. *Human Relations, 47*(4), 455–471. https://doi.org/10.1177/001872679404700404

Danna, K., & Griffin, R. W. (1999). Health and well-being in the workplace: A review. *Journal of Management, 25*(3), 357–384. https://doi.org/10.1177/014920639902500305

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job Demands–Resources model of burnout. *Journal of Applied Psychology, 86*(3), 499–512. https://doi.org/10.1037/0021-9010.86.3.499

Dhar, R. L. (2016). Ethical leadership and service innovative behavior: The role of LMX and job autonomy. *Tourism Management, 57*, 139–148. https://doi.org/10.1016/j.tourman.2016.05.011

Feng, J., Zhang, Y., Liu, X., Zhang, L., & Han, X. (2018). Ethical leadership and creativity: The roles of creativity encouragement and intrinsic motivation. *Journal of Business Ethics, 153*(3), 645–658. https://doi.org/10.1007/s10551-016-3311-4

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables. *Journal of Marketing Research, 18*(1), 39–50. https://doi.org/10.1177/002224378101800104

Fuller, C. M., Simmering, M. J., Atinc, G., Atinc, Y., & Babin, B. J. (2016). Common method variance in business research. *Journal of Business Research, 69*(8), 3192–3198. https://doi.org/10.1016/j.jbusres.2015.12.008

Furnham, A., Eracleous, A., & Chamorro-Premuzic, T. (2021). Personality, motivation, and job satisfaction: Herzberg meets the Big Five. *Journal of Managerial Psychology, 34*(8), 597–611. https://doi.org/10.1108/JMP-12-2018-0537

Grawitch, M. J., Gottschalk, M., & Munz, D. C. (2006). Pathways to a healthy workplace. *Consulting Psychology Journal: Practice and Research, 58*(3), 129–147. https://doi.org/10.1037/1061-4087.58.3.129

Guest, D. E. (2017). Human resource management and employee well-being. *Human Resource Management Journal, 27*(1), 22–38. https://doi.org/10.1111/1748-8583.12139

Gupta, V., MacMillan, I. C., & Surie, G. (2004). Entrepreneurial leadership: Measuring a cross-cultural construct. *Journal of Business Venturing, 19*(2), 241–260. https://doi.org/10.1016/S0883-9026(03)00040-5

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis* (7th ed.). Pearson Education.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis* (8th ed.). Cengage Learning.

Harter, J. K., Schmidt, F. L., & Keyes, C. L. M. (2002). Well-

being and workplace performance. In C. L. M. Keyes & J. Haidt (Eds.), *Flourishing: The positive person and the good life* (pp. 205–224). American Psychological Association.

Harvey, S. B., Joyce, S., Tan, L., Johnson, A., Nguyen, H., & Modini, M. (2017). Creating mentally healthy workplaces: A review. *Australian & New Zealand Journal of Psychiatry, 51*(1), 4–22. https://doi.org/10.1177/0004867416679354

Hobfoll, S. E. (2011). Conservation of resources theory. *Journal of Occupational and Organizational Psychology, 84*(1), 116–122. https://doi.org/10.1111/j.2044-8325.2010.02016.x

Iqbal, A., Latif, F., Marimon, F., & Sahibzada, U. F. (2022). Entrepreneurial leadership and innovative work behavior. *European Journal of Innovation Management, 25*(3), 856–877. https://doi.org/10.1108/EJIM-09-2020-0362

Javed, B., Rawwas, M. Y., Khandai, S., Shahid, K., & Tayyeb, H. H. (2017). Ethical leadership and creativity. *Journal of Management & Organization, 23*(3), 1–17. https://doi.org/10.1017/jmo.2016.66

Judge, T. A., Thoresen, C. J., Bono, J. E., & Patton, G. K. (2001). Job satisfaction–job performance relationship. *Psychological Bulletin, 127*(3), 376–407. https://doi.org/10.1037/0033-2909.127.3.376

Karasek, R. A. (1979). Job demands, decision latitude, and mental strain. *Administrative Science Quarterly, 24*(2), 285–308. https://doi.org/10.2307/2392498

Kimbu, A. N., de Jong, A., Ayedun, T., & Adeola, O. (2021). Entrepreneurial leadership in sustainable tourism. *Tourism Management, 83*, 104254. https://doi.org/10.1016/j.tourman.2020.104254

Kock, N. (2017). Common method variance in PLS-SEM. *International Journal of e-Collaboration, 13*(4), 1–10. https://doi.org/10.4018/IJeC.2017100101

Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Schaufeli, W. B., de Vet, H. C. W., & van der Beek, A. J. (2014). Measuring individual work performance. *International Journal of Productivity and Performance Management, 63*(1), 3–28. https://doi.org/10.1108/IJPPM-01-2013-0008

Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., van Buuren, S., van der Beek, A. J., & de Vet, H. C. (2014). Construct validity of the individual work performance questionnaire. *Journal of Occupational and Environmental Medicine, 56*(3), 331–337. https://doi.org/10.1097/JOM.0000000000000134

Linge, T. K. (2019). Job rotation and employee motivation. *Journal of Organizational Change Management, 32*(3), 456–470. https://doi.org/10.1108/JOCM-10-2018-0285

Luu, T. T. (2019). Service-oriented high-performance work systems and service-oriented behaviors in public organizations: The mediating role of work engagement. *Public Management Review, 21*(9), 1286–1312. https://doi.org/10.1080/14719037.2018.1544271

Masood, M., & Afsar, B. (2017). Transformational leadership and innovative work behaviour among nurses. *Nursing Inquiry, 24*(4), e12188. https://doi.org/10.1111/nin.12188

Miao, Q., Newman, A., Schwarz, G., & Cooper, B. (2018). Leadership and innovative behavior. *Public Administration Review, 78*(1), 71–81. https://doi.org/10.1111/puar.12839

Noor, M. N. S., Rahman, Y., Islam, R., Ahamed, R., Joti, A. A., Islam, M. R., & Uddin, M. B. Linking HR Analytics to Organizational Performance: The Mediating Roles of HR Decision Making and Talent Management. *The International Journal of Business Management and Technology, 9*(12), 16-29.

Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric theory* (3rd ed.). McGraw-Hill.

Peccei, R. (2004). Human resource management and the search for the happy worker: Theory, analysis and intervention. *Human Relations, 57*(4), 379–400. https://doi.org/10.1177/0018726704044747

Renko, M., El Tarabishy, A., Carsrud, A. L., & Brännback, M. (2015). Entrepreneurial leadership style. *Journal of Small Business Management, 53*(1), 54–74. https://doi.org/10.1111/jsbm.12086

Roy, I., & Islam, R. (2025). Beyond transformational leadership: Servant leadership and knowledge sharing. *Journal of Knowledge Management.* Advance online publication. https://doi.org/10.1108/JKM-02-2025-0270

Roy, I., Islam, R., & Sarwar, S. (2024). Impacts of Transformational Leadership on Quiet Quitting and Cyberloafing: Exploring the Role of Emotional Stability and Work Stress. *International Journal of Latest Research in Engineering and Management, 8*(5), 10-24. https://doi.org/10.56581/ijlrem.8.5.10-24

Roy, I., Islam, R., Arefin, M. S., & Rahman, S. (2025). How perceived supervisor and organizational support shape job satisfaction: the intervening role of work-life balance and organizational identification. *Open Journal of Business and Management., 13*(4), 2782-2809. https://doi.org/10.4236/ojbm.2025.134148

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and burnout. *Journal of Organizational Behavior, 25*(3), 293–315. https://doi.org/10.1002/job.248

Surie, G., & Ashley, A. (2008). Pragmatism and ethics in entrepreneurial leadership. *Journal of Business Ethics, 81*(1), 235–246. https://doi.org/10.1007/s10551-007-9491-4

Van De Voorde, K., Paauwe, J., & Van Veldhoven, M. (2012). Employee well-being and HRM–performance relationship. *International Journal of Management Reviews, 14*(4), 391–407. https://doi.org/10.1111/j.1468-2370.2011.00322.x

Warr, P. (2002). *Psychology at work* (5th ed.). Penguin.

World Health Organization. (2004). *Mental health promotion: Concepts, emerging evidence, practice.* World Health Organization.

Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of performance. *Journal of Occupational Health Psychology, 5*(1), 84–94. https://doi.org/10.1037/1076-8998.5.1.84

Wright, T. A., & Cropanzano, R. (2004). The role of psychological well-being in job performance: A fresh look at an old construct. *Journal of Organizational Behavior, 25*(4), 365–392. https://doi.org/10.1002/job.248