

Exploring the moderating role of job stress on the relationship between ethical leadership and employee job performance

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Abstract: This study addresses the present limited understanding of the complex relationship between ethical leadership, job stress, and employee job performance in the hotel business. This study shows that job stress moderates the association between ethical leadership and employee job performance, underlining the necessity for more research in the industry. The present study fills a crucial research void in our understanding of the complex interaction between these factors. The study utilizes a sample of 292 employees in the accommodation and hotel industry. Prior to commencing data collection, the questionnaire underwent thorough validation and reliability testing to ensure that the instrument met all specified criteria and demonstrated robustness. Using hierarchical regression analysis, the study reveals substantial findings. It has been discovered that ethical leadership has a direct and positive effect on employee job performance. Notably, job stress emerges as a significant moderating variable that affects the relationship between ethical leadership and employee job performance. This highlights the crucial role that job stress plays in determining outcomes. The research indicates that reducing workplace stress and fostering ethical leadership can result in improved employee job performance. In addition, the study highlights the importance of social learning theory in enhancing employee job performance, with job stress and ethical leadership serving as significant moderating factors.

Keywords: ethical leadership; employee job performance; job stress; moderating effect; accommodation; hotel industry

1. Introduction

In the highly competitive and constantly changing environment of modern companies, it is crucial to recognize the importance of cultivating optimal employee performance. The concept of ethical leadership (EL) has emerged as a promising factor in the pursuit of enhancing employee job performance (EJP). By adopting EL practices, organizations are able to reduce operational expenses (Huang et al., 2023) and thereby efficiently mitigate their operational expenditures. In today's fast-paced corporate environment, it is critical to cultivate employee motivation and empowerment to facilitate their realization of their maximum capabilities, ultimately leading to optimal work performance. Previous studies have shown several benefits that EL may offer to businesses, including promoting employee commitment, increased job engagement, improved job satisfaction, encouraging responsible citizenship, and reducing turnover intentions. Existing studies emphasize the importance of EL in terms of its positive influence on employees and potential for firms to reduce costs.

Despite the extensively acknowledged merits of ethical leadership, a notable deficiency exists in the scholarly literature regarding the impact of EL on workers' EJP and in-role performance (Ouakouak et al., 2020). The phenomenon of job stress (JS) has become a significant concern in contemporary work environments (Javaid, 2023), particularly within sectors such as accommodation and hospitality. In these industries, employees encounter various stressors, including heavy workloads, demanding customer service standards, unpredictable shift schedules, high-pressure circumstances, difficulties in maintaining work-life balance, and concerns regarding job stability. The many mental, emotional, and physical health difficulties employees encounter in the workplace may adversely affect their capacity to engage in EJP.

However, despite the recognition of ethical leadership's potential benefits, we do not fully understand the relationship between EL and EJP, particularly how job stress may moderate this relationship. This gap in understanding presents a critical problem: organizations may not be fully leveraging EL to enhance EJP if they do not account for the moderating effects of job stress. Therefore, the following primary research question motivates this study: How does job stress modulate the relationship between ethical leadership and employee job performance?

Because emotional leadership, job stress, and employee job performance are all connected in a lot of different ways, people are interested in when job stress acts as a moderating factor and how well emotional leadership affects employee job performance.

The current research compilation primarily focuses on examining various leadership styles, individual employee attributes (Ahn et al., 2018; Ahmed Iqbal et al., 2020), and job satisfaction (Qing et al., 2020) as potential factors that may elucidate the connection between successful leadership and EJP. Regrettably, we have not thoroughly examined the role of professional JS as a moderator in this intricate relationship. The presence of an information gap creates a strong incentive for further investigation, specifically in understanding the interplay between JS and EL and their impact on EJP (Schwepker et al., 2021). Also, it's clear that there is a big hole in the research that looks at the connection between JS and EL, especially the part that JS plays as a moderator that affects how EL works and how well it can predict EJP. The lack of research in this area is significant because there is an existing correlation between JS and EL. This lack of knowledge also creates a one-of-a-kind chance to make a major academic and useful contribution to comprehending the results of psychological effort within the context of JS (Iskamto, 2021).

Excessive job strain may counteract the benefits of emotional labor, but moderate degrees of stress may produce different results. To provide a clear rationale for our research, we focus on the following specific research questions: To what extent does job stress moderate the relationship between ethical leadership and employee job performance? In what ways can ethical leadership mitigate the adverse effects of job stress on employee job performance? How does the interplay between ethical leadership, job stress, and employee job performance vary across different industries?

The primary goal of this study is to provide a thorough and coherent understanding of the influence of EL on EJP, as well as the moderating effect of JS on the relationship between EL and EJP. By doing so, this study aims to contribute to the existing body of knowledge in the fields of organizational behavior and human

resource management. The results obtained from this study contribute to existing knowledge and provide valuable insights that can enable firms to more effectively encourage and assist their employees in attaining heightened job efficiency and overall productivity.

2. Theoretical background

The concept of social learning theory offers a comprehensive theoretical framework for comprehending ethical leadership, since it delves into the mechanisms through which individuals observe and engage with others to acquire and internalize actions, beliefs, and attitudes. Albert Bandura's theory offers valuable insights into the impact of ethical leadership on the behavior and ethical development of individuals in an organizational context (Bandura, 1997). The concept of role modeling plays a pivotal part in this collaborative process. According to Wang (2021), ethical leaders play a significant role in businesses because they serve as notable role models. According to Brown et al. (2005), employees consistently exhibit ethical conduct and maintain moral principles, leading to a beneficial impact on their job performance. Additionally, the presence of stress affects the relationship between moral leadership and worker performance. Recent research suggests that the presence of elevated levels of stress can affect the influence of ethical leadership on employee performance (AlShehhi, 2020). Meanwhile, the impact of ethical leadership on employee performance may be attenuated in high-stress settings, underscoring the intricate relationship among ethical leadership, stress, and performance.

Within the framework of social learning theory, ethical leaders serve as exemplars whose actions and choices set a standard for others to imitate. Furthermore, existing research demonstrates that ethical leadership serves as a moderating element, effectively reducing the detrimental effects of stress on employee performance (AlShehhi, 2020). Previous research conducted by Brown et al. (2005) and Bandura (1986) indicate that employees demonstrate a greater propensity to internalize and integrate similar ethical concepts and principles into their own conduct when provided with opportunities to see and engage with ethical leaders.

Social learning theory further emphasizes the significance of observational learning. Employees in a corporate setting observe the ethical decision-making processes and actions of leaders. Through this observation, individuals acquire a deep understanding of ethical principles and values, subsequently integrating them into their own conduct. The approach described above has a substantial impact on cultivating a cultural atmosphere that prioritizes ethical behavior and motivates individuals to engage in ethical education by observing and emulating ethical role models (Treviño et al., 2000). Furthermore, the theory places considerable stress on the role of reinforcement and consequences as essential elements within the learning process. Malik et al. (2023) claimed that ethical leaders create an environment that fosters and incentivizes ethical behavior by acknowledging and recognizing it, as well as by providing beneficial outcomes. In turn, this strengthens individuals' commitment to ethical ideals. Meanwhile, the occurrence of unethical conduct is accompanied by repercussions that function as a deterrent and underscore the need to adhere to ethical norms.

The relationship between ethical leadership and employee job performance is subject to the moderating influence of job stress. Ethical leaders have a significant position inside businesses, as they act as exemplars who promote ethical conduct and uphold moral principles. This association between ethical leadership and positive employee job performance is frequently seen. Nevertheless, the present investigation shows how the existence of elevated levels of occupational stress can potentially influence this association. The presence of high-stress conditions has the potential to attenuate the beneficial impact of ethical leadership on employee job performance. Ethical leaders possess the ability to inspire, encourage, and foster a culture characterized by ethical behavior. However, it is important to acknowledge that job-related stress may serve as a mitigating force in this regard. The complex interplay between ethical leadership, stress, and performance highlights the imperative for firms to proactively tackle stress management and establish an environment conducive to fostering ethical leadership and employee welfare.

It is imperative for organizations to acknowledge the correlation between mitigating job stress and augmenting the favorable influence of ethical leadership on employee job performance. Strategies that prioritize stress reduction, such as the implementation of work-life balance initiatives, stress management programs, and the presence of supportive leadership, have the potential to foster an environment that is conducive to the cultivation of ethical leadership and optimal employee performance. Moreover, comprehending the moderating influence of job stress on the correlation between ethical leadership and employee job performance offers significant insights for businesses aiming to establish a workplace atmosphere that promotes ethical conduct and optimizes employee performance.

2.1. Employee job performance

EJP refers to employee behavioral outcomes. Job performance is an issue that has received much attention from scholars and researchers in behavioral science and management to determine what makes EJP effective (Yu et al., 2022). Job performance is an indicator of employee work achievement level. The concept of job performance is dynamic and an important structure of human resource management and organizational psychology (Oswald et al., 2020). LePine et al. (2002) indicated that EJP can be divided into two dimensions as in-role and extra-role, whereby employees behave outside company requirements. EJP can materialize in the form of giving assistance to colleagues or voluntarily joining various company activities. Murphy (1989) viewed EJP as an in-role activity that describes employee behaviors in particular tasks.

Giao et al. (2020) considered EJP as an employee's ability to operate well and achieve goals under work contexts within deadlines. Generally, employees are assigned to perform their responsibilities, but to improve performance companies should promote good supervision to ensure optimal outcomes. López-Cabarcos et al. (2022) argued that EJP reflects work behavior or expression to achieve goals, while Campbell (1990) viewed job performance as the behavior of an employee to achieve company goals. EJP can be considered in both positive and negative dimensions with regard to operational performance outcome, complaints, sales, or service quality.

Therefore, job performance is not a single unified concept but comprises various perspectives considering each type of work operation. To conclude, EJP reflects the effort to perform work assignments on time. Here, EJP was assessed in the role dimension of work duties to reflect the real outcome of operational behaviors.

2.2. Ethical leadership

Brown et al. (2005) used social learning theory (Bandura, 1977; Bandura, 1986) to explain the antecedents and outcomes of EL. Social learning theory clarifies certain personal leadership characteristics and situational influences in relation to followers' perceptions. Social learning theory considers EL to be an interesting model with a respectful role in the eyes of employees. Brown et al. (2005) suggested that followers of EL tend to perceive themselves in an exchange-based social relationship with their leaders due to ethical practice and trust. When employees perceive that their leaders care about them with consideration of mutual benefits, they tend to respond to EL by improving their work effectiveness. Similarly, the social learning paradigm of EL influences employee self-efficacy because ethical leaders are interesting role models in legitimate roles to enhance employees to achieve work potential (Bandura, 1986, Bandura, 1997).

Burns (1978) and Sergiovanni (1992) studied EL using the term 'moral leadership'. Scholars and researchers define EL as the behavior of an administrator to subordinates and colleagues in a correct and proper way through interacting with one another, enhancing other people to behave and practice properly, providing opportunities to ask questions, reinforcing strong ethical habits, making decisions, and expressing behaviors according to customs, traditions, conventions, or social standards. These behaviors result in ethical leaders being respected, relied upon, and accepted by their subordinates according to their position or authority with pride as a role model to follow (Saha et al., 2020). Burns (1978) stated that EL is a transformation whereby both leaders and followers change according to the process of transformational leadership, leading to ethical enhancements to conduct and aspirations. Moreover, the dynamics of EL enable both leaders and followers to achieve maximum success, acceptance, admiration, and interdependence. Similarly, Dey et al. (2022) considered that EL involves the behavioral performance of all staff members to attain goals and follow leaders who are reliable, trusted, and caring. EL respects human rights and builds teams and collaborative networks, raising awareness of responsibility and behaving as a role model. EL is therefore very important in work operations because company success relies on ethical behaviors which are accepted and trusted to build collaboration and work effectively. Furthermore, being a good role model for EL results in successful employee performance (Zaim et al., 2021). In summary, EL involves exemplifying behavior aligned with ethical values through personal conduct and interactions. EL requires fostering proper conduct among followers through bidirectional communication, empowerment, and decision-making. Leaders in this paradigm maintain a comprehensive view of the complex challenges that businesses encounter daily. Making informed decisions in this context necessitates a blend of both knowledge and experience.

EL has a significant impact on EJP and leaders who act ethically inspire trust and

integrity in their teams (Zaim et al., 2020), while leaders who are ethical and principled motivate and engage employees (Ashfaq et al., 2021). EL values and help employees via fairness, transparency, and open communication (Alam et al., 2021) which boosts workplace happiness and commitment and subsequently improves EJP by inspiring employees to work ethically and professionally. Numerous previous studies have found the relation between EL and EJP, for example, Kia et al. (2019) considered that EL significantly increased the effectiveness of EJP. Additionally, EL plays an important role in motivating employees to operate at their full potential. Shafique et al. (2020) stated that the ethical roles or behaviors of leaders drive and support employees to a sense of comfort, openness, and effective communication. EL also has a positive relationship and direct effect on EJP besides social and cultural factors (Oladimeji and Abdulkareem, 2023). However, situations may arise in which employees are stimulated, driven, or motivated (Marisya, et al., 2023) because EL provides the necessary resources to facilitate their work (Oladimeji and Abdulkareem, 2023), enabling employees to work actively and effectively (Kim et al., 2019). Eluwole et al. (2022) mentioned that EL develops subordinates by empowering, giving freedom, and assigning responsibility suitable for each employee's potential. These factors promote a supportive work environment through EL which increases EJP. Based on the concepts, theories, and previous studies, the first hypothesis was posited as follows.

- H1: EL has an influence on EJP.

2.3. Job stress as a moderating variable

JS is a mental health problem that occurs in every employee who faces various pressures (Bakker and de Vries, 2021). People of working age have higher desires and responsibilities for a good career path, acceptance, income, and life stability. These factors all lead to JS, with inevitable associated issues of mental health and physical illness. Wu et al. (2021) stated that JS is a personal reaction when facing pressures from environmental or work situations, conflicts, time, workload, and work quality. JS has a direct effect on a person's feelings towards their job. Moreover, each person has different feelings, experiences, and stress management. Different levels of stress impact performance efficiency and effectiveness. The three main factors of JS are: 1) organizational factors, for instance issues of policy, structure, work environment, human resource management, unfair work process, inequality of returns, or unclear or unsuitable work process (Aloisio et al., 2021); 2) group factors including problems when working with colleagues, supervisors, groups, or teams such as a lack of harmony, lack of ability, lack of trust, lack of support, lack of relationship, as well as conflicts and slander (Chung et al., 2021; Uddin et al., 2021); 3) personal factors consisting of problems of role conflict, role ambiguity or personality, different roles in the family, workplace and community, receiving improper information or knowledge at work, ineffective communication, improper training, and Type A and Type B personalities (Friedman and Rosenman, 1959). All of these factors can result in overstress and negatively impact physical health (Schlömmer et al., 2021; Zahoor et al., 2021).

In the pursuit of understanding the complex relationship between JS and EL, a

fundamental question arises. The focus of this study is on the interplay between EL and EJP in the context of JS. The impact of increased levels of JS on this relationship is indisputable and significant. The phenomenon of JS is characterized by its ability to drain the energy levels of individuals, leading to the depletion of their mental and emotional resources. In turn, this prompts individuals to employ various coping strategies in response. Moreover, it exerts a tangible impact on motivation, job satisfaction, and the perceived levels of support and justice within the corporate context. In the presence of significant pressures, the positive effects of ethical leadership may be diminished or completely negated, as evidenced by recent empirical investigations (Abdelmoteleb, 2019). However, it is imperative to acknowledge that elevated levels of JS do not constitute the whole narrative. The relationship between EL and EJP under conditions of moderate stress levels presents a distinct narrative. This is the context in which we evaluate the possibility of a more intricate and advantageous impact. Key factors such as strong organizational support structures and the coping mechanisms utilized by individuals emerge as significant aspects. The complex dynamics at play emphasize the urgent need for additional investigation, motivated by the desire to reveal the precise circumstances in which JS acts as a moderating factor in the connection between EL and EJP. The extensive research carried out by Hsieh et al. (2011) demonstrates how the academic endeavor has the potential to shed light on the intricate dynamics present in contemporary work environments.

Zhou et al. (2021) considered that JS occurred from the need to respond to internal and external psychological and emotional stimuli. Employee JS can result in negative behaviors with the inability to operate at full potential. Some empirical studies demonstrate clear evidence that stress can cause extroverted employees to become introverted. Schwepker and Dimitriou (2021) stated that the perception of EL was negatively associated with employee JS. They explained that JS results from a negative mental or emotional state that causes lower perceived EL. Schwepker and Ingram (2016) found that the JS of salespeople occurred from abnormal mental perception, resulting in less perceived ethical behavior of executives although the executives created a proper work environment with trust and fair management. This occurred because JS impacts the perception of what is desired by management. Abreu (2018), Nawaz et al. (2015) and Yang and Hu (2010) agreed that JS acts as a moderating variable of in-role and extra-role behaviors. Although employees perceive that their leaders are ethical at any level, JS causes a reduced perception of EL and, consequently, reduces EJP. Therefore, the second hypothesis was posited as follows.

- H2: JS is a moderating variable between EL and EJP.

According to the concepts, theories, and previous studies, EL directly affects job performance. In the current literature, the explanation of EL is inadequate and does not completely explain the phenomenon. Therefore, using JS to co-explain EL is challenging and important to reflect EJP effectively since JS is common among employees. The results of this research will be helpful in explaining the characteristics and direction of the JS phenomenon together with EL. Personal factors were used as control variables in this study, as presented in the research framework below.

Figure 1 presents the conceptual model used to test the developed hypotheses. This basic model examined the direct influence of EL on EJP (H1) by considering

personal factors as control variables. The model was later expanded by adding JS as a moderating variable of EL to examine the moderating influence of JS between EL and EJP (H2).

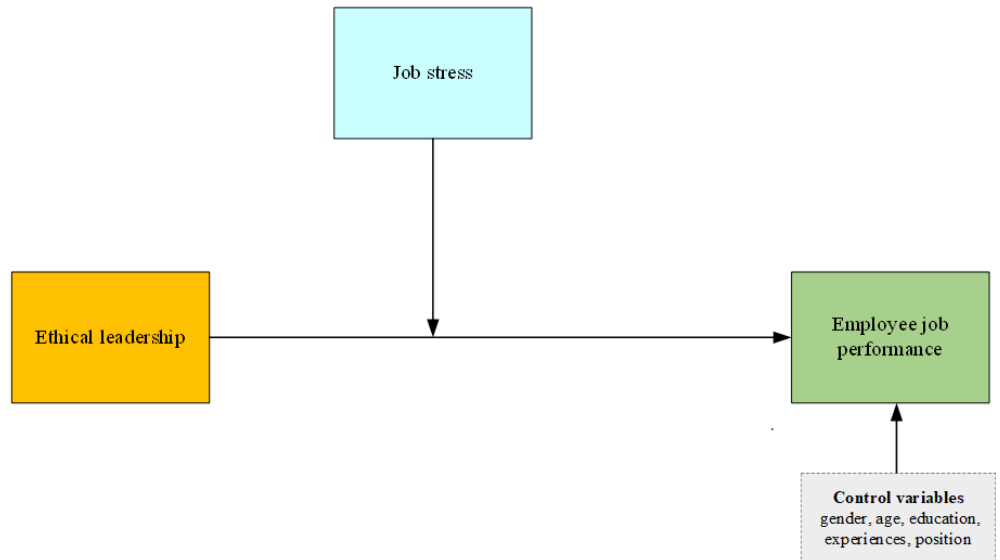


Figure 1. Research framework.

3. Research methodology

In this study, the units of analysis were 400 employees of the accommodation and hotel industry who worked in the Bangkok Metropolitan Area. This population group was suitable for the study because they worked in a dynamic industry (Holston-Okae and Mushi, 2018) where high effectiveness of employee in-role job responsibility is required and EL is necessary to promote and drive employees to deliver work performance effectively (Schwepker and Dimitriou, 2021). Employees in this industry are often faced with JS from their responsibilities of providing customer services and responding to different internal and external demands (Yousaf et al., 2020). The researchers visited the study sites to request cooperation from the human resource department or related managers to send a link to the online questionnaire to their employees who were willing to participate in the research project. The convenience sampling method was used to assist the human resource managers in distributing the questionnaire to the sample. The inclusion criteria for the targeted sample were: (1) employees currently working in the accommodation and hotel industry in the Bangkok Metropolitan Area; (2) employees who have been in their current position for at least six months. The exclusion criteria were: (1) employees not willing to participate in the study; (2) employees who were on leave or unavailable during the data collection period. After an 8-week waiting period, completed questionnaires were received from 324 respondents, with 292 questionnaires (73%) complete and correct. According to Joungrakul (2016), a response rate over 70% is considered very good, and the number of completed questionnaires in this study was at a very high level and sufficient for analysis.

Research instrument, validity, and reliability

The questionnaire was developed from previous published articles in journals and improved to suit the context of this study. The JS scale with two items was applied from the scale of Park et al. (2020), the EL scale of 10 items was adapted from the questionnaire of Brown and Treviño (2006), and the EJP scale with 13 items was adapted from the questionnaire of Na-Nan et al. (2018). All scales were examined for content validity by five experts in organizational behavior, management, industrial psychology, human resource development, and testing and evaluation. Results showed content validity values ranging 0.8–1.0. The scales which passed content validation were examined for questionnaire reliability. Reliability was 0.935 and acceptable for data collection.

The convergent validity of the scales was tested according to the concept of Fornell and Larcker (1981) who suggested that confirmatory factor analysis should be used to test the construct validity of each factor in the model to determine real factors according to the concept and theory of testing with empirical data. The statistics of Chi-square (χ^2), degree of freedom (*df*), significance (*p*-value), goodness of fit (GFI), adjusted goodness of fit index (AGFI), comparative fit index (CFI), normed fit index (NFI), Tucker-Lewis index (TLI), standard root mean square residual (SRMR), and root mean square error of approximation (RMSEA) were considered (Kline, 2015). The results were as follows: $\chi^2 = 235.240$, *df* = 204, *p*-value = 0.066, GIF = 0.943, AGIF = 0.909, CFI = 0.994, NFI = 0.960, TLI = 0.992, RMSEA = 0.023 and SRMR = 0.037. Standardized factor loading values were considered at the significance of *p* < 0.001 (all t-values were over 3). Therefore, all questionnaire items were significantly related under the theoretical structure.

To test structure reliability according to the idea of Fornell and Larcker (1981), composite reliability (CR) and average variance extracted (AVE) were used. This was done by looking at the scales and the model structure of the final measurement. As presented in **Table 1**, the CR values of all factors were between 0.913 and 0.947, and were therefore over 0.7 indicating a high reliability level, whereas the AVE values were 0.517 and 0.840, which were higher than the criterion (AVE > 0.50). Therefore, all theoretical structures were considered acceptable psychological constructs.

Table 1. Confirmatory factor analysis results when testing the questionnaire items.

Latent factors/questions	Factor loading	Construct validity	
		CR	AVE
JS			
js1	0.905	0.913	0.840
js2	0.928		
EL			
e11	0.845	0.947	0.647
e12	0.736		
e13	0.877		
e14	0.503		
e15	0.844		

Table 1. (Continued).

Latent factors/questions	Factor loading	Construct validity	
		CR	AVE
e16	0.821		
e17	0.880		
e18	0.818		
e19	0.854		
e110	0.796		
EJP			
ejp1	0.654		
ejp2	0.757		
ejp3	0.737		
ejp4	0.786		
ejp5	0.832		
ejp6	0.826	0.931	0.517
ejp7	0.771		
ejp8	0.807		
ejp9	0.532		
ejp10	0.504		
ejp11	0.623		
ejp12	0.687		
ejp13	0.737		

4. Results and discussion

Descriptive statistics were used to analyze the characteristics of the samples and variable levels. Hierarchical regression analysis was used to examine relationships, direct effects, and the moderating influences of the variables using the SPSS program. A simulation was then performed in low, medium, and high situations of JS moderating EL using the PROCESS Macro 3.1 with Model 3 (Hayes, 2013).

From **Table 2**, two-thirds of the respondents were female (64%) with the remainder male (36%). About one-third were 36–39 years old (31.8%), followed by 31–35 (27.7%), 26–30 (18.2%), and 22–25 and over 40 (22.3%). Nearly all the respondents graduated with a bachelor’s degree and 9.9% had a master’s degree. About two-fifths of the respondents had over 10 years’ work experience (43.2%), followed by a third with 7–9 years (30.5%), 4–6 years (11.6%), and less than 1 year and 1–3 years (14.7%).

In **Table 3**, the highest mean was for EJP, followed by EL and JS (3.928, 3.631, and 3.066, respectively). The highest standard deviation was for JS, followed by EL and EJP (1.080, 0.702, and 0.600, respectively). All the studied variables showed continuous correlation. Analysis results between the independent and dependent variables showed both positive and negative relationships ranging from –0.115 to 0.575. To consider multicollinearity, the researchers used the concept of Young (2017) which states that relationships should also consider multicollinearity, with a value less than 0.80 indicating no multicollinearity, according to the basic assumption of the

regression analysis.

Table 2. Participants’ personal data.

Personal characteristics		Frequency	Percent
Gender	Male	105	36
	Female	187	64
Age	22–25	33	11.3
	26–30	53	18.2
	31–35	81	27.7
	36–39	93	31.8
	More than 40	32	11.0
Education	Bachelor’s degree	263	90.1
	Master’s degree	29	9.9
Experience	Less than 1 year	20	6.8
	1–3 years	23	7.9
	4–6 years	34	11.6
	7–9 years	89	30.5
	Over 10 years	126	43.2
Position	Junior staff	66	22.6
	Senior staff	226	77.4

Table 3. Means, standard deviations, and correlation coefficients among the study variables.

	Mean	SD	1	2	3	4	5	6	7	8
1 Gender	-	-	1	-	-	-	-	-	-	-
2 Age	-	-	0.138*	1	-	-	-	-	-	-
3 Education	-	-	0.059	0.050	1	-	-	-	-	-
4 Experience	-	-	0.041	0.595**	0.029	1	-	-	-	-
5 Position	-	-	-0.115*	0.012	0.071	-0.067	1	-	-	-
6 EL	3.631	0.702	-0.025	-0.051	0.009	-0.076	0.020	1	-	-
7 JS	3.066	1.080	0.016	0.060	0.146*	0.009	0.097	0.002	1	-
8 EJP	3.928	0.600	0.030	-0.010	-0.002	-0.041	0.016	0.575**	-0.088	1

Notes: ** indicates significance at 0.01, * indicates significance at 0.05.

To assess the influence of EL on EJP by the moderating variable of JS, four regression models were tested, as presented in **Table 4**. The control variables in the first model consisted of gender, age, education, experience, and job position to consider whether EL has an influence on EJP. The results from Model 2 indicated that EL had an influence on EJP at statistical significance of 0.02. Therefore, the findings support Hypothesis 1.

Table 4. Hierarchical regression results for EL, JS, and EJP.

	Model 1	Model 2	Model 3	Model 4
Constant	3.902*** (15.518)	2.126*** (7.698)	2.228*** (7.776)	1.215* (2.428)
Gender	0.030 (0.397)	0.068 (1.053)	0.068 (1.049)	0.060 (0.944)

Table 4. (Continued).

	Model 1	Model 2	Model 3	Model 4
Age	0.018 (0.471)	0.009 (0.279)	0.012 (0.360)	0.013 (0.407)
Education	-0.001 (0.014)	-0.002 (-0.022)	0.009 (0.109)	0.009 (0.115)
Experience	-0.040 (-1.104)	-0.011 (-0.364)	-0.012 (0.109)	-0.016 (-0.510)
Position	0.046 (0.536)	0.052 (0.710)	0.061 (-0.392)	0.056 (0.768)
EL	-	0.445*** (10.255)	0.440*** (10.107)	0.706*** (6.064)
JS	-	-	-0.037* (-1.311)	0.294* (2.135)
EL × JS	-	-	-	-0.085* (-2.459)
R ²	0.006	0.274	0.278	0.294
Adjusted R ²	-0.011	0.259	0.261	0.274
R ² change	0.006	0.268	0.004	0.015

Notes: *** indicates significance at 0.001, * indicates significance at 0.05.

JS was designed as the main predictor in Model 4 to test Hypothesis 2 regarding whether EL has an influence on EJP when it was moderated by JS in low, medium, and high situations. The results show that JS had a moderating effect on EL to EJP with statistical significance and conditioned interaction between EL and JS inserted in regression Model 4. The results show that EL had a significant influence on EJP ($b = 0.706, p = 0.001$). Interestingly, the regression influence coefficient of leadership and JS was significantly negative ($b = -0.085, p = 0.05$) and could predict the increasing variance of EJP at 2.94% under the control variables (gender, age, education, experience and position). The results indicate that EL had an influence on EJP, depending on employee JS. Therefore, Hypothesis 2 was accepted and supported. The results are presented in **Figure 2** for clarity.

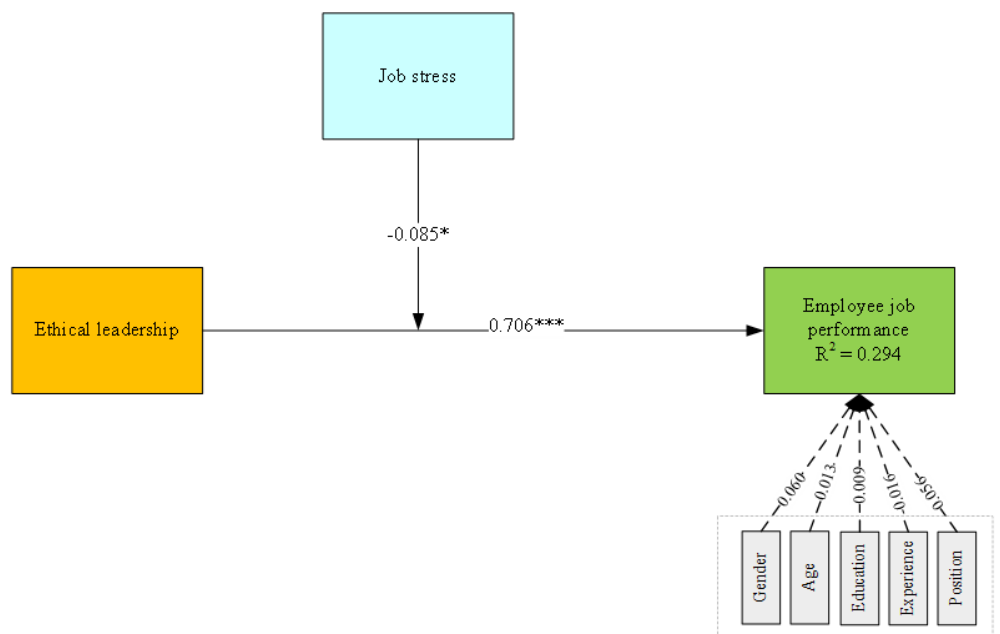


Figure 2. Moderating effect of JS on EL with influence on EJP.

According to the concept of Hayes (2013), the PROCESS macro for SPSS

presents the moderating effect and explains the conditions that impact predications at different levels of the moderators. The pick-a-point analysis considers details at three relationship points of the moderator (JS) with the independent variable that influences the dependent variable when JS was at low, medium, and high levels (i.e., 1.986, 3.066, and 4.146, respectively) in moderating EL on EJP. Interestingly, JS in different situations (low, medium, and high) moderated EL on EJP with significance in all three situations, while JS in low, medium, and high situations had significance values ($p = 0.001$) as shown in **Table 5**.

Table 5. Simple slope values of the moderating variable in a 2-way interaction.

Stress	Effect	se	<i>t</i>	<i>p</i>	LLCI	ULCI
1.986 (−SD)	0.537	0.058	9.179	0.000	0.422	0.652
3.066	0.445	0.043	10.311	0.000	0.360	0.530
4.146 (+SD)	0.353	0.055	6.370	0.000	0.244	0.463

Notes: $X \times W \geq R^2\text{-chng} = 0.015$, $F = 6.0472$, $df1 = 1.000$, $df2 = 283.000$, $p = 0.014$.

Results of the moderating influence with conditions according to the pick-a-point method were statistically significant at all points by considering the slope values in three situations. In the first situation with low JS, job stress had a moderating effect on EL to EJP ($b = 0.537$, $p = 0.001$, 95% CI [0.422, 0.652], $t = 9.179$). With medium JS, it had a moderating effect on EL to EJP ($b = 0.445$, $p = 0.001$, 95% CI [0.360, 0.530], $t = 10.311$), and with high JS, it had a moderating effect on EL to EJP ($b = 0.353$, $p = 0.001$, 95% CI [0.244, 0.463], $t = 6.370$). These findings are illustrated graphically in **Figure 3**.

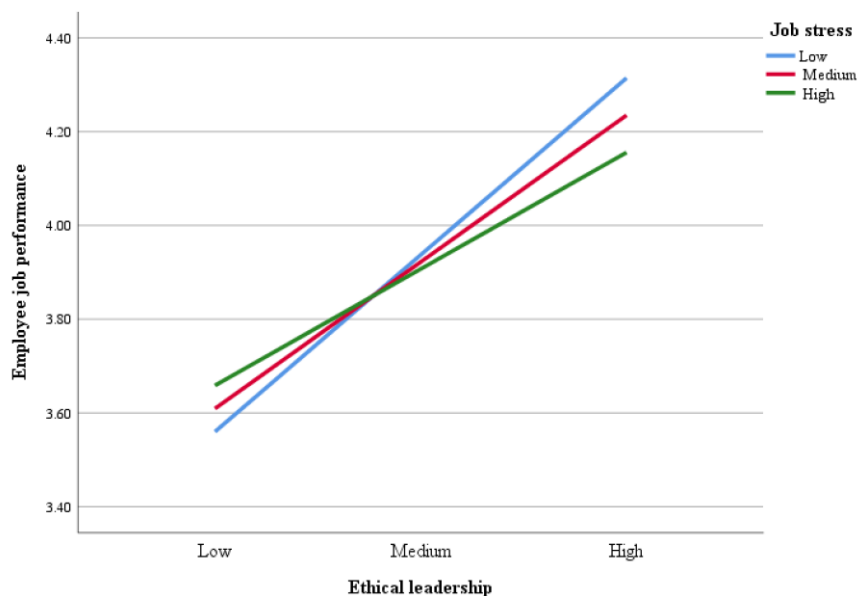


Figure 3. JS in low, medium, and high situations as a moderating variable on EL to EJP.

5. Discussion

The significant and positive relationship between EL and EJP found in this study suggests that EL can drive EJP (Kia et al., 2019; Shafique et al., 2020; Zaim et al.,

2021). These findings are consistent with previous studies that have demonstrated the positive impact of EL on EJP. For instance, Shafique et al. (2020) and Zaim et al. (2021) highlighted that EL fosters an environment of trust and ethical sensitivity, thereby enhancing overall EJP. Our findings also show that JS can significantly reduce EJP. When the two variables are combined, EJP can still increase. These findings support and conform to previous studies (Eluwole et al., 2022; Kia et al., 2019; Kim et al., 2019; Shafique et al., 2020).

The results of this study provide strong evidence to support the notion that EL has a significant impact on EJP, as indicated by statistical analysis. The findings of this study align closely with Bandura's widely recognized social learning theory (Bandura, 1986), which suggests that individuals acquire knowledge and behaviors through observation and interaction with their surroundings, particularly through the influence of role models and authoritative figures. The study portrays ethical leaders as those who embody virtuous conduct, thus serving as role models for employees to imitate. EL engenders trust and confidence among their employees by exemplifying caring, ethical decision-making, and a commitment to improving operational efficiency. The aforementioned findings highlight the notion that EL fosters an environment characterized by trust and ethical sensitivity, thereby enhancing the overall EJP.

The congruence between the results of this study and research conducted by Eluwole et al. (2022), Kia et al. (2019), Kim et al. (2019), Shafique et al. (2020) provides additional support for the beneficial impact of EL on EJP. The presence of EL attributes consistently leads to a notable improvement in EJP, as evidenced by previous research, including the present study. This effect is based on the concept that EL, in their capacity as role models, actively endorse, advocate for, and provide assistance to employees. These traits often identify leaders who possess certain qualities such as fairness, open and honest communication, responsiveness to inquiries and concerns, and the ability to inspire and motivate their people. By exemplifying these characteristics, ethical leaders establish a model standard for others to emulate. The consistent findings observed across multiple studies highlight the strong and widespread connection between EL and EJP. This research corpus provides organizations with significant insights, emphasizing the importance of fostering and growing EL within their managerial ranks. Doing so promotes a culture of trust and ethical behavior while also improving EJP. The aforementioned observations, which are based on empirical data and supported by the principles of social learning theory, have significant implications for the implementation of organizational leadership strategies and their subsequent impact on workforce efficiency.

The results indicate that JS, as a moderator, had a negative influence on the relationship between EL and EJP. This means that JS has an influence on reducing employee perceptions of EL. Concepts, theories, and previous studies support this finding, suggesting that stress is an inevitable problem, particularly for employees with high responsibilities and occupational expectations, as well as those working in rapidly changing environments (Benson and Deeter, 1992). Consequently, mental health problems, also known as JS, cause employees to become preoccupied with resolving their problems, potentially leading to a lack of awareness of EL and ultimately a reduction in job performance. This finding is consistent with Abreu (2018), Nawaz et

al. (2015), Schwepker and Ingram (2016), Van Den Tooren and De Jonge (2008), Wang (2012), Yang and Hu (2010), Zhou et al. (2021) and Zhou et al. (2015). These previous studies used JS as a moderator to predict in-role and extra-role work behaviors, and all concurred that JS tends to cause employees to perceive or perform behaviors in a negative way. Therefore, when employees become stressed, they inevitably perceive lower EL, with reduced performance in their in-role and extra-role work. Previous studies have shown that JS is a mental and emotional state that moderates or controls employee perceptions, emotions, and behaviors.

Three situations significantly explained EJP in the low, medium, and high JS and EL models. Low employee JS and low perceived EL led to low EJP. By contrast, low employee JS but highly perceived EL led to high EJP, indicating that EL is helpful in reducing employee JS by giving advice, promoting, motivating, and supporting employees to live and work smoothly and effectively in daily life and at work. Alternatively, high JS and low perceived EL led to low EJP. However, high JS and highly perceived EL also led to low EJP. We can explain this phenomenon by understanding that high JS, a personal mental state, can lead to a diminished personal perception of the environment, which in turn leads to ineffective performance. In another situation, medium JS and moderately perceived EL can also predict moderate job performance. This means that employees with medium JS may show a reduced perception of EL, resulting in moderate job performance. However, at low, medium, and high levels, JS moderated EL and resulted in a significant increase in EJP. These findings are particularly relevant for organizations looking to enhance their leadership practices and stress management programs, indicating that fostering EL and managing JS can significantly improve EJP.

5.1. Theoretical implications

1) The present study's findings are consistent with prior studies about the impact of ethical leadership (EL) on employee job performance (EJP). The findings provide empirical evidence supporting the hypothesis that EL exerts a direct impact on the improvement of EJP. Nevertheless, it is important to acknowledge that certain prior research has indicated that EL may not exert a substantial impact on EJP. In the context of open innovation dynamics, organizations should consider the role of ethical leadership for both internal processes and also in external collaboration. Ethical leadership principles, such as transparency and fairness, can enhance trust and cooperation in open innovation partnerships, ultimately contributing to more successful collaborative ventures.

2) This study emphasizes the importance of conducting a thorough investigation into the impact of job stress (JS) on EJP across different levels, particularly within Thai firms. The findings indicate that there is a statistically significant moderating effect of JS at low, medium, and high levels on the link between EL and EJP. This contribution enhances the theoretical framework and comprehension of the impact of JS on the interplay between leadership and performance. In the realm of open innovation, understanding the influence of job stress on the relationship between ethical leadership and employee job performance becomes crucial. Open innovation often involves collaborating with external partners, and recognizing the role of job

stress as a moderator can guide organizations to more effectively manage external collaborations under varying stress levels.

3) The study highlights the notion that although JS is unavoidable, it can be well managed and perceived as a constructive challenge, resulting in stress. The notion of eustress, which pertains to perceiving stress as a beneficial element, posits that training, establishing a work atmosphere that fosters support, and offering assistance from supervisors and coworkers can assist employees in properly managing and dealing with job stress. This concept enhances the theoretical comprehension of how JavaScript can be effectively controlled to facilitate favorable performance results. In the context of open innovation, organizations must consider the management of stress as a means to enhance creativity and innovation in collaborative projects. Implementing strategies to perceive stress as eustress and providing a supportive environment for employees involved in open innovation initiatives can promote more successful and innovative outcomes.

5.2. Practical implications

1) The study underscores the strategic importance of prioritizing and actively promoting ethical leadership within organizations. The discerned positive impact of EL on EJP calls for targeted interventions, such as leadership training, coaching, or mentoring programs. Organizations aspiring to foster a culture of ethical leadership can implement these strategies to cultivate attributes such as integrity and fairness. In open innovation, the adoption of ethical leadership principles can significantly enhance collaborative efforts with external partners. By promoting these principles, organizations aim to bolster trust and facilitate successful collaboration in open innovation initiatives. The findings also indicate that the universal value of core principles of ethical leadership—integrity, fairness, and transparency—allows for the effective application of these strategies across diverse cultural contexts. However, organizations should consider cultural nuances and adapt their leadership training programs accordingly to maximize their effectiveness in diverse settings.

2) The findings emphasize the critical need for addressing and managing JS in the workplace, highlighting its direct implications for EJP. We urge human resource managers and organizational leaders to prioritize the implementation of effective stress management methods. This involves the introduction of training programs, the establishment of robust support systems, and the creation of a conducive work environment that promotes employee well-being and productivity. In the context of open innovation, where external collaborations are prevalent, effective stress management emerges as a pivotal factor to ensure sustained high performance among employees engaged in collaborative projects. Additionally, the impact of JS and the effectiveness of stress management techniques may vary across cultures. Organizations operating in multicultural environments should tailor their stress management approaches to address the specific stressors and coping mechanisms prevalent in different cultural contexts.

3) This study advocates for the adoption of targeted stress management strategies within organizations. Allocating resources to personnel development programs can enhance employees' capacity to cope with and adapt to JS, leading to improvements

in both in-role and extra-role performance. The practical implementation of this understanding involves implementing stress management training and support initiatives designed to assist employees in maintaining optimal performance levels despite the challenges associated with stress. In the context of open innovation, incorporating such stress management programs can strengthen the adaptability and resilience of employees involved in collaborative ventures, ultimately contributing to the success of open innovation projects. Given the diverse cultural backgrounds of employees, organizations should consider incorporating culturally relevant stress management techniques that resonate with employees' values and beliefs. This can enhance the overall effectiveness of stress management programs and improve employee engagement and performance across different cultural settings.

In conclusion, the results of this study have significant implications from both a theoretical and a practical standpoint. The findings contribute to existing knowledge regarding the intricate connection between EL, JS, and EJP. Moreover, these findings offer valuable insights that organizations can apply to enhance their leadership practices, effectively manage stress levels, and ultimately improve employee performance. The study also highlights the importance of considering cross-cultural differences when implementing these strategies to ensure their generalizability and effectiveness in diverse organizational contexts. Subsequent investigations can expand upon these consequences to further enhance understanding within this domain.

6. Conclusion

In this study, the authors aimed to investigate the moderating effect of job stress (JS) on the relationship between ethical leadership (EL) and employee job performance (EJP), contributing to the literature by highlighting the significant role of JS in this dynamic. The findings confirm that JS acts as a moderator in the relationship between EL and EJP. Specifically, the results demonstrate that EL has a significant positive impact on EJP across low, medium, and high levels of JS. These findings expand upon previous studies by Choi et al. (2019), Hutchins et al. (2018) and Ryu et al. (2020), which found that negativity reduced EJP. Moreover, the results align with the work of Schwegker and Ingram (2016), and Zhou et al. (2021), which identified JS as a moderating factor that can diminish EJP.

The present study's findings contribute valuable insights to the development of concepts and theories related to EL by demonstrating its potential to reduce JS and enhance EJP. This research has practical implications for promoting and supporting employees to effectively perform both in-role and extra-role work. We should not overlook these important questions, as they are necessary to explain the effectiveness of increasing EJP in rapidly changing operational contexts. Empirical results from various sources, industries, and countries can provide answers to these questions and explain different phenomena.

Additionally, this study offers practical contributions by providing organizations with strategies to enhance EL and manage JS to improve EJP. Various organizational contexts can apply these insights to foster ethical leadership and create supportive work environments that reduce job stress. However, the authors acknowledge some limitations of the study. First, using a single respondent from each organization may

not be representative of the entire organization, as bias may exist when rating one's own performance. Future studies should utilize multiple data sources and include executive ratings to improve the accuracy of EJP assessments. Furthermore, to provide a more comprehensive explanation of EJP, the research framework should incorporate additional variables such as self-efficacy, resilience, motivation, and perceived work environment, in addition to EL and JS. The results are only valid within the specific context of employees in the accommodation and hotel industry. Therefore, to achieve maximum benefits and effectiveness, the application of these study results should be carefully considered and adapted to suit each context. Moreover, a longitudinal research study is necessary to gain insights into the causal relationships between EL and EJP, with JS as a moderator. Although the researchers made their best efforts, they should manage or eliminate common method bias resulting from using respondents from a single source, even though this study underwent validation prior to analysis. Future studies should consider using respondents from different sources to reflect real outcomes as accurately as possible.

In conclusion, this study achieves its objective by elucidating the crucial role of EL in enhancing EJP, particularly under varying levels of JS. The comprehensive analysis underscores the importance of EL in mitigating JS and promoting superior job performance, providing a solid foundation for future research and practical applications in diverse organizational settings. Future research should focus on exploring these dynamics in different industries and cultural contexts, using diverse methodologies to validate and extend these findings. Longitudinal studies would be particularly valuable in understanding the long-term effects of EL and JS on EJP.

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