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Deciphering work environment impacts on organizational citizenship behavior: The mediating role of job satisfaction in Ghana's tourism industry

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Abstract

This study aims to examine the mediating role of job satisfaction in the relationship between the work environment and organizational citizenship behavior within the Ghana tourism industry, utilizing the Job Demands-Resources paradigm to explore these relationships. Data from 361 individuals were obtained via online surveys disseminated using Google Forms, employing convenience sampling. The data were analyzed using the Structural Equation Modeling (SEM) methodology to examine the direct and indirect correlations among the variables in AMOS version 23. The results show that the work environment has a significant and positive influence on job satisfaction and organizational citizenship behavior. Furthermore, a significant positive relationship exists between job satisfaction and organizational citizenship behavior. The study discovered that job satisfaction partially mediates the relationship between the work environment and organizational citizenship behavior. The study's findings have significant real-world ramifications for Ghana's tourism sector.

Keywords: Ghana, hospitality industry, job demand-resource theory, job satisfaction, organizational citizenship behavior, work environment.

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1. Introduction

The work environment (WE) substantially impacts employees' productivity and well-being, encompassing physical, social, and psychological aspects [1]. Favorable weather conditions are crucial and indispensable for the tourism industry. It improves customer service and promotes in-person interaction between workers and visitors. An environment characterized

by happiness in the workplace leads to enhanced productivity, staff retention, and increased employee satisfaction [2]. Employees with elevated drive and unwavering commitment tend to provide exceptional customer service, leading to contented consumers, referrals, and favorable evaluations. In order to maintain a competitive edge in the dynamic and rapidly evolving tourism industry, it is essential to establish a WE that fosters creativity, reduces employee attrition, and enhances collaboration Barreto and Mayya [3]. Tajeddini et al. [4] assert that the substantial investment made by tourism firms in fostering a conducive WE can substantially impact their reputation, operational efficiency, and profitability.

The voluntary activities that employees take on outside of their designated roles to enhance and improve the performance of the company as a whole are referred to as organizational citizenship behavior (OCB) [5]. The OCB concept is fresh and ground-breaking for the travel and tourism industries. Employees who exhibit OCB support and uplift their colleagues create a positive WE and provide excellent customer service [6]. This behavior positively affects the team's performance, customer satisfaction, and the development of a friendly and cooperative work atmosphere. OCB can help achieve more employee engagement, reduced attrition rates, and higher morale, all necessary to maintain a competitive edge in the service-oriented tourism business [7]. By promoting OCB, tourist organizations can enhance operational efficiency, foster client loyalty, and boost their profitability and reputation.

The WE exerts a substantial influence on OCB within the tourism business. A conducive WE promotes OCB by establishing circumstances that motivate individuals to go beyond their prescribed job responsibilities [8]. Employees in a supportive and pleasant WE experience a sense of worth, admiration, and drive, leading to their active participation in volunteer actions that help their colleagues and the firm. Employees are more likely to engage in OCB with a favorable physical environment, comfortable workstations and well-maintained amenities. They feel physically comfortable and experience less stress [9]. The social milieu, encompassing positive interactions with superiors and peers, fosters inclusion and comradeship, motivating employees to assist and engage in cooperative efforts.

OCB is improved by a healthy psychological environment that includes acknowledgement, fair treatment, and opportunities for professional development [10]. Employees are more likely to proactively take on additional responsibilities that positively impact the company when they feel appreciated for their contributions and see potential for career growth. The significance of OCB is particularly remarkable in the tourist sector, where prioritizing the demands and contentment of customers is essential. Employees who exhibit OCB are more inclined to anticipate and fulfil client requests, deliver exceptional visitor experiences, and provide exceptional customer service [11]. This conduct improves the organization's visibility, promotes customer loyalty, and generates positive word-of-mouth endorsements.

Ghana's tourism industry faces significant consumer satisfaction and employee productivity challenges, which are vital for the industry's growth and long-term sustainability [12]. Several tourism-related businesses in Ghana face difficulties, including high employee turnover rates, low job satisfaction levels, and uneven service delivery [13, 14]. Some of these challenges can be attributable to a lack of user interaction and support, unfavorable physical working conditions, lack of recognition, limited opportunities for professional advancement, and tense relationships between management and employees are common problems that negatively impact employee morale and productivity [15, 16]. Therefore, employees' lack of OCB leads to decreased productivity, less collaboration, and unsatisfactory client encounters [17]. In order to address these problems, a comprehensive analysis of how improving WE could drive OCB and boost the performance of Ghana's tourism industry is required.

The effect of the WE on OCB has been the subject of earlier research [18, 19]. None of this research was carried out in Ghana's tourism sector. Additionally, the literature has not explored how job satisfaction (JS) mediates the relationship between WE and OCB, creating a knowledge gap. This study is essential for tourism organizations as it can guide the development of satisfaction-improved WE that boosts JS and promotes behaviors that enhance organizational performance and customer satisfaction.

This study aims to bridge this gap by investigating how JS mediates the relationship between the WE and OCB in Ghana's tourism industry. The study seeks to answer the following questions: How does the WE impact JS? What is the impact of JS on OCB, and how does JS mediate the relationship between the WE and OCB? A comprehensive study of these aspects is crucial for the development of the tourism industry in Ghana.

Firstly, the study contributes to the literature by examining the influence of the WE on JS. This study comprehensively analyses how the elements of the WE, including physical conditions, social interactions, and possibilities for professional development, impact employees' JS. The study provides a comprehensive and detailed analysis of the correlation between WE and JS among workers in the tourism industry in Ghana. Due to the scarcity of research regarding JS determinants, the Ghanaian tourist sector can heavily rely on this study's findings.

Furthermore, the study significantly contributes to the existing literature by investigating the impact of job satisfaction (JS) on organizational citizenship behavior (OCB). A positive correlation between JS and participation in extracurricular activities highlights the importance of JS in promoting OCB. This discovery will be highly significant for the tourism industry that aims to enhance the quality of their offerings and the overall effectiveness of their business by motivating staff to take proactive and voluntary actions.

Our study significantly adds to theoretical and empirical studies by examining how job satisfaction (JS) mediates the relationship between work engagement (WE) and organizational citizenship behavior (OCB). This study emphasizes the indirect mechanism by which a supportive work environment (WE) boosts job satisfaction (JS) and ultimately improves organizational citizenship behavior (OCB). Understanding this mediation effect is crucial and enlightening, as it will provide the tourism industry with the fundamental mechanisms needed for its operation, where job satisfaction (JS) would be integrated into work engagement (WE) and organizational citizenship behavior (OCB). The results will offer valuable advice on cultivating work environments that promote increased job satisfaction (JS) and organizational citizenship behavior (OCB)

for tourism industry managers. This comprehensive approach addresses existing gaps in the literature and provides practical strategies to enhance employee well-being and attain favorable results in the tourism industry.

A strategic plan that involves modifying the human resources in Ghana's tourist sector can incorporate the study's findings. The findings will provide insight into how customized interventions focusing on managerial and workplace practices can improve the implementation of policies, leadership development efforts, and training programs, leading to increased job satisfaction (JS), work engagement (WE), and, ultimately, organizational citizenship behavior (OCB). Gaining a deeper understanding of the factors influencing OCB could lead to consistent and long-lasting progress for the firm. When employees consciously demonstrate acts beyond their official work obligations to assist the organization, there is potential for positive growth in the organizational culture, employee loyalty, and overall sustainability of the Ghanaian tourism industry. The subsequent sections discuss the literature review and methodology, followed by data analysis, discussions of the findings, and finally, the conclusion.

2. Literature Review

2.1. Theoretical Background

The JD-R hypothesis is a core concept in organizational psychology crucial for understanding the complex connection between employee well-being, job demands, resources, and organizational outcomes Bakker et al. [20]. Bakker and Demerouti [21] propose a well-recognized framework that categorizes job characteristics into two main groups: job demands (JDs) and job resources (JRs).

Many work-related elements, known as JDs, require ongoing physical, psychological, or emotional exertion and are associated with costs that impact both the body and mind [21]. The demands of the Ghana Water Company's operational structure may encompass a substantial workload, limited leisure time, unclear job assignments, and conflicting expectations [22]. Excessive workloads can substantially elevate stress levels in employees and adversely affect their health [23].

Job resources, or JRs, are components of the work environment that facilitate attaining work-related objectives, reduce job-related stress, and foster professional and personal development Bakker and Demerouti [21]. Xanthopoulou et al. [24] conducted a study that scrutinizes various resources, including social support, progress-promoting feedback mechanisms, autonomy in decision-making, a diverse pool of abilities, and opportunities for professional growth. Bakker and Demerouti [21] argue that work resources, also known as JRs, are crucial in reducing the adverse effects of job stress (JS) and promoting employee engagement and well-being.

JS is critical for ensuring employees' well-being because it mediates the Job Demands-Resources (JD-R) paradigm. The literature includes accounts of affective reactions to one's work environment and surroundings [25, 26]. JDs and JRs may result in a decline in morale within Ghana's tourist sector. The study discovered that JS is higher in individuals with favorable WE, sufficient resources, and attainable objectives Bakker and Demerouti [27]. Sharma et al. [28] document a decline in the correlation between OCB and JS. According to Agyepong et al. [29], if a company in Ghana's tourism industry met all the workers' requirements and effectively managed the demand, the workers would have greater job satisfaction. Therefore, people may participate in OCB, which includes acts of civic duty, hard work, and benevolence, all of which can contribute to the organization's achievement. The JD-R theory explains how the Ghana tourism industry's WE, JS, and OCB interact. JS may mediate between the WE (including job demands and resources) and employees' OCB involvement. This idea illuminates workplace discretionary conduct mechanisms.

2.2. Work Environment

The WE includes all elements that can influence an individual's daily productivity, including the timing, location, and work style. WE refer to the specific location, social dynamics, and physical circumstances in which an individual carries out their professional duties [30, 31]. These factors can impact employees' emotions, interpersonal dynamics, teamwork, and well-being. For a productive WE, it is crucial to have environmentally friendly options and innovative designs that foster a good atmosphere [32, 33]. According to Fisher [34], people in a positive WE are more inclined to accept new responsibilities and acquire new knowledge, but are also inspired and motivated. Conversely, a bad working environment creates an unsafe atmosphere and work permeability, according to Burgard and Lin [35], and hinders the potential for growth and innovation. In a positive WE, workers feel more creative while developing ideas Amabile et al. [36] and tend to say yes and take chances [37]. Consequently, mastering the workplace is the first step towards succeeding in the corporate sector, and the potential for growth and innovation is limitless.

The WE utmost important in shaping individuals' emotional states in their workplace [38]. It encompasses the tangible environment in which employees operate and intangible factors such as office dynamics and interpersonal connections [39]. These elements significantly influence the performance of any employee, whether they work in the office or remotely, as they interact with them daily [40]. A positive WE enhances employee morale, improves concentration, and creates a productive climate for both workers and their managers [41]. The workplace's physical arrangement, equipment and tools, ambient noise and illumination, the allowance for music, temperature and ventilation, and safety and security are all contributing factors [42]. In addition, the office environment includes social and cultural elements, such as organizational culture, communication style, interpersonal connections, and the level of employee support and acknowledgement [43].

2.3. Organizational Citizenship Behavior

OCBs are voluntary actions performed by individuals that go beyond their regular work duties and benefit their organization [44, 45]. OCB encompasses behaviors that support the overall welfare and profitability of the organization, its clientele, and its workforce by fulfilling several obligations Lin et al. [46]. Organ [47] introduced it as having five dimensions.

The identified aspects include conscientiousness, civility, sportsmanship, civic obligation, and altruism [48]. Altruism is the practice of engaging in actions that promote the welfare of others, such as assisting colleagues who are overwhelmed by a high volume of clients. Conscientiousness is exhibited when an employee surpasses their job obligations, for instance, by aiding customers in acquiring personal belongings, particularly those who lack familial assistance. Sportsmanship is the ability to retain an optimistic attitude while abstaining from complaining about one's responsibilities, even when dealing with many clients. Engaging in behaviors explicitly evading problems is regarded as a manifestation of courtesy [47]. Efficient communication and giving prior notice of absence are additional examples of civility. Employees who exhibit civic virtue genuinely engage with the company and actively contribute to its advancement [49]. This can be discerned by examining their involvement in committees and their endeavors to improve the organization's operational efficiency [45, 48]. Managers typically look for employees who exhibit OCB to increase their organizations and enhance client satisfaction [50].

2.4. Job Satisfaction

JS improves employees' physical and mental health, affecting productivity, absenteeism, turnover, and employee relations [51]. It also significantly boosts company finances [52]. Therefore, organizations must comprehend and address employee job satisfaction. Generally, JS is the level of contentment or joy a person experiences in employment. Several elements can influence this, including the inherent characteristics of the task, the WE, the organization's culture, and how well the worker gets along with interpersonal interactions with their colleagues. An individual who experiences JS is more inclined to display substantial echelons of productivity and motivation and less likely to resign from their current employment, Akbudak [53]. Locke et al. [54] presented the prevailing notion of JS as an excellent emotional state arising from job appraisal. In this concept, cognitive (job evaluation) and affective (emotional state) parts indicate how positive or negative individuals feel about their jobs. It also measures how well someone's psychological contract is met Arvey et al. [55]. Smith [56] classified all JS as intrinsic or extrinsic. Intrinsic sources are inherent to individuals and hold psychological worth. Such pleasures are self-administered. Extrinsic satisfaction comes from outside the individual. External factors like job security and fringe perks impact extrinsic pleasure. Some sources of satisfaction are external or tangible but have intrinsic or psychological worth because of what they signify. For example, 'a high salary' and fast career growth' provide contentment.

Several departments and teams use JS surveys. Employees use them to gauge whether or not they are content in their current roles and find meaning in their work. Businesses leverage them as a gauge for employee performance and retention rates. Academics frequently use them to gauge morale and its potential impact on output.

2.5. Hypotheses Development

2.5.1. Influence of WE on OCB

Although the workplace is crucial when searching for a job, most of the world's leading firms are making significant efforts to foster a bright environment that fosters positive energy [57]. This is done to enhance employee performance and productivity in their respective roles. A favorable WE, which promotes employee well-being, JS, and productivity, can enhance employee welfare and JS, mitigating stress and ameliorating mental well-being [58]. It can lead to reduced staff turnover rates, enhanced productivity, and overall gains in work performance [59]. A pleasant WE has the potential to enhance productivity and ingenuity, ultimately leading to improved job performance. Employees are more likely to exhibit creativity and innovation when they experience a sense of comfort and support in their workplace. A positive WE can would an organization's culture, impacting its employees' beliefs, attitudes, and behaviors [60]. A positive response promoting a culture characterized by self-assurance, teamwork, and respect is within our capabilities [61].

Several empirical studies have investigated the intricate correlation between WE and employees' involvement in OCB, offering a valuable understanding of the intricate mechanisms that impact volunteer activities within a company. For example, Podsakoff et al. [62] demonstrate that a favorable work environment is a reliable indicator of employees' engagement in OCB. Their findings underscore the importance of a fair and supportive work environment in inspiring employees to go beyond their designated duties, thereby benefiting the entire organization.

Handayani et al. [63] conducted a quantitative study investigating the influence of work engagement (WE) and loyalty on organizational citizenship behavior (OCB) at PT Bangkobakti Perdana Trijaya Pekanbaru Labuhanbatu Selatan, North Sumatra. After studying the records of 80 workers, the researchers found a direct correlation between WE and OCB. The researchers can understand the framework more deeply by exploring variables such as job satisfaction (JS), personality, job pressure, leadership style, organizational commitment (OC), and organizational culture.

In a quantitative survey conducted by Hodowu [64], the correlation between WE and job performance was examined among 210 University of Health and Allied Sciences employees. The findings revealed a robust correlation between employee WE and performance. Baidoo et al. [65] looked at the psychosocial WE and burnout among 1,222 public university employees in Ghana. The findings of their study demonstrated the noteworthy impacts of job demands, choice latitude, interpersonal aid, and intimidation on several facets of burnout. Specific correlations, meanwhile, lacked statistical significance.

Podsakoff et al. [45] provided evidence supporting the idea that a favorable WE is strongly linked to higher levels of OCB among employees in various organizations. Their meta-analysis highlighted the crucial significance of the WE in promoting a favorable climate for OCB, with a particular emphasis on the influence of leadership, organizational culture, and job characteristics. This insight into the key factors influencing a positive WE can guide future research and organizational practices.

H₁: The WE significantly influences employees' OCB.

2.5.2. Influence of WE on JS

Workers worry about a safe, healthy workplace. According to Pal [66], individuals want to work and stay in happy workplaces. Shrivasti and Bhola [67] defined WE as conditions that may either motivate or dissuade employees from working. Previous studies have demonstrated that the workplace impacts JS, motivation, and performance [68]. Workplace social and physical factors affect employee JS and overall well-being, and contented workers are more productive [69]. Lower JS, absenteeism, somatic problems, burnout, and depression are linked to unfavorable WE Khamisa et al. [70].

Scott-Ladd [71] found that decision-making at work increases JS, underscoring the importance of a positive WE. Tio [72] examined the impact of WE on employee JS using 74 samples and multiple regression analysis. The study showed that WE strongly influences JS. Another study by Shrivasti and Bhola [67] found a favorable association between organizations' WE and JS, participation, productivity, and efficiency. Since satisfaction is ubiquitous and has been shown in several studies [52, 56, 68]. The positive impact of a healthy and positive workplace on productivity is undeniable. Good vibes will spread like wildfire throughout the office, fostering a more productive and efficient WE. Hence, the following hypothesis was developed.

H₂: Work environment significantly influences job satisfaction.

2.5.3. Influence of JS on OCB

JS and OCB are essential concepts in organizational psychology and management. There is a strong and well-accepted connection between JS and OCB, as evidenced by multiple studies demonstrating a positive association [73]. Theoretical frameworks, such as Social Exchange Theory, Affective Events Theory, and Job-Demand Resource Theory, offer valuable insights into the mechanisms that explain this association. Nevertheless, this study's JDR (job demands-resources) theory establishes a clear link between JS and OCB. The JDR theory suggests enhancing job satisfaction by utilizing resources such as autonomy and supporting OCB [74]. Resources are crucial in motivating and supporting employees to exceed their legally required responsibilities [75]. An empirical study provides evidence for the importance of both internal and external JS in influencing OCB. Individuals can optimize their performance and flourish by increasing job satisfaction and encouraging a positive organizational culture.

Jun et al. [76] identified a strong positive association between JS and OCB. They contended that JS and OCB are crucial aspects of an organization. These elements can play a crucial role in enhancing business and staff efficiency. Zeinabadi [77] also posited that built-in JS is a prominent factor that directly and indirectly affects OCB, with the partial mediation role of value commitment. The above discussion resulted in the following hypothesis development:

H₃: JS significantly influences OCB.

2.5.4. Mediating Role of JS between WE and OCB Relationship

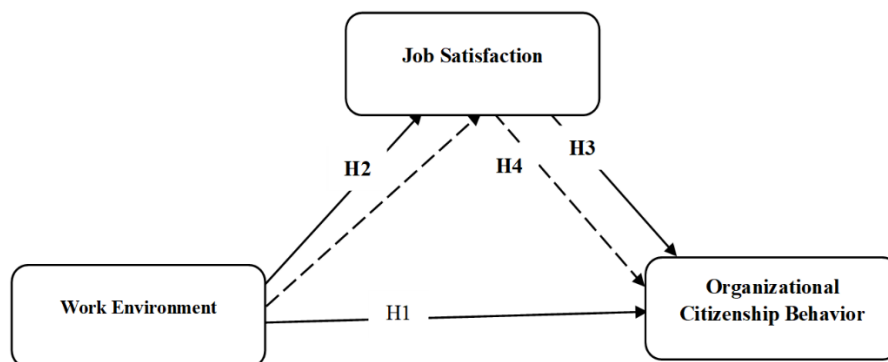
Job demands and resources in the Ghana tourism industry affect employees' OCB. Employment demands like workload and time pressure can strain employees, while resources like social support and growth can boost their capacities and well-being [27]. The WE significantly impacts JS, a crucial aspect of staff wellness in the JD-R model. Employee JS is contingent upon their views of the WE, which involves balancing desired outcomes and resources [78].

In the tourism industry, an employee's JS is probably influenced by their workplace. Increased JS acts as an intermediary that influences the connection between the WE and the display of OCB. An environment that promotes JS through reasonable workloads and sufficient resources encourages employees to actively participate in beneficial behaviors for the organization [79].

This mediation model, grounded in the JD-R theory, delineates the intricate correlation among the WE, JS, and employees' propensity to engage in OCB. The study emphasizes the substantial influence of workers' sensitivities to their WE on their levels of JS and how this subsequently impacts their voluntary actions, such as OCB, within the business. From the discussions above, we assumed that:

H₄: JS significantly mediates the relationship between WE and OCB.

From the literature review and hypothesis development, the research model was developed (Figure 1).



Legend: —> Direct effect - -> Mediating

Figure 1. Research model.

3. Methodology

3.1. Research Design

This study employed a quantitative cross-sectional design within a positivist paradigm [80]. The quantitative technique prioritizes numerical data, involves convenience sampling, and necessitates thoroughly predetermined research objectives. It utilizes organized data collection tools, such as surveys, to extrapolate the study's findings [81]. Using a cross-sectional survey strategy, the researcher used questionnaires to gather data from a substantial proportion of the target population simultaneously, guided by the comprehensive research objectives.

3.2. Targeted Population

This study focuses on the employees of the tourist sector across five different Ghana regions. The choice of these regions offers a wide-ranging and inclusive representation of the country's tourism industry, incorporating different geographical, cultural, and economic settings. By evaluating workers from different regions, the study seeks to comprehensively understand the relationship between WE, JS, and OCB in Ghana's tourism industry.

An essential aspect of enhancing service quality and fostering sustainable growth in Ghana's tourist business is comprehending the factors that impact employee behavior and satisfaction. The tourist business places significant importance on staff interactions that directly influence the experiences and satisfaction of its consumers due to its intrinsic service orientation. Hence, to improve customer service, achieve a competitive advantage, and ensure the long-term sustainability of tourism businesses, it is crucial to promote OCB among employees in the tourism industry in Ghana [82].

3.3. Sample Size and Sample Technique

The tourism sector is scattered across all the regions in Ghana, making it difficult to determine the exact number of employees working in this sector. Using Cochran's [83] method, we successfully determined the most suitable sample size for this study, enabling us to gather enough data to make reliable inferences, address our research questions, and contribute substantially to existing knowledge. When the population proportion is unknown, this method can assist in selecting a suitable sample size to ensure that the results accurately represent the entire population. By employing Cochran's formula, we effectively control the margin of error and confidence levels, guaranteeing the dependability and precision of the study's conclusions. Researchers can enhance their findings' quality and pertinence by determining the optimal sample size. The formula is quoted as:

$$n = \frac{z^2}{4e^2} \quad (1)$$

“n” is the required sample size.

“Z” is the Z-score corresponding to the desired confidence level.

“e” is the desired margin of error.

$$n = \frac{1.96^2}{4(0.05)^2} \quad (2)$$

$$n = \frac{3.8416}{0.01} \quad (3)$$

$$n = 384$$

The sample size was determined using Cochran's method, and 361 employees were recruited from each of Ghana's five regions using a convenience sampling technique. Despite an initial expectation of 384 participants, only 361 completed the survey. The number of responses is slightly lower than the projected sample size due to incomplete survey responses and logistical issues in reaching all intended participants.

Convenience sampling was selected to engage participants from all sectors of Ghana's tourist industry because of its efficacy and convenience. It is crucial to acknowledge the constraints of convenience sampling, notwithstanding its advantages in terms of accessibility and cost-effectiveness. We employed rigorous measures to guarantee that the sample reflected the population throughout the participant selection. Individuals from five distinct regions and multiple tourist destinations were carefully selected for this. By adopting this approach, we can enhance trust in the dependability of our findings.

The survey achieved an impressive response rate of 98.34%, indicating that it effectively engaged and motivated participants to provide valuable feedback for the study. Our successful utilization of Google Forms, a highly accessible technological tool, to efficiently gather data reinforces the validity of our findings.

3.4. Measures

The items for each questionnaire construct were selected from instruments that have undergone testing and validation by various authors, following a thorough examination of empirical investigations. This study adopted the WE scale from Saxena and Kaur [84], comprising twelve items. When attempting to determine this impact on the happiness and productivity of tourist workers, it is essential to select a scale that assesses factors such as physical conditions, social interactions, and opportunities for career growth. The researchers employed this scale to get further insights into the determinants impacting OCB and JS among tourist workers in Ghana. In order to improve the efficiency of a company and the overall well-being of its employees, it is crucial to have a clear understanding of these factors. This will enable the identification of areas that require improvement and the development of appropriate solutions.

The evaluation scale on JS, which consists of a five-item scale, was adopted from the study of Obeng et al. [85]. Ghana's tourism industry relies heavily on the JS scale, a tool used to assess intrinsic motivation, work-life balance, and satisfaction with supervisors and coworkers. Ensuring exceptional customer service and maintaining a competitive edge in this domain

relies on contented workers. Assessing JS and identifying the elements that enhance or diminish it led to the adoption of these scale items. The objective of adopting this scale for data gathering was to facilitate the creation of focused interventions to enhance employee performance and retention.

The OCB measurement utilized the four-item scale developed by Parker and Collins [86]. Han et al. [87] utilized the same scale in Chinese manufacturing firms and determined it to be extremely trustworthy. This scale is specifically created to assess employees' discretionary behaviors beyond their regular job obligations, thereby developing a pleasant work culture and improving organizational performance in the tourism industry. These behaviors encompass assisting coworkers, engaging in organizational tasks, and exhibiting proactive problem-solving. The researchers used the OCB scale to assess workers' exertion in activities to enhance customer satisfaction and the organization's overall success. The objective was to identify strategies for Ghanaian tourist enterprises to foster a culture of mutual assistance and collaboration.

Nyarko et al. [88] employed a 5-point scale to assess the measures, where a rating of 1 represented "strongly disagree" and a rating of 5 represented "strongly agree".

3.5. Statistical Tool for Data Analysis

The data collected from the participants was carefully examined using Covariance-Based structural equation modelling (CB-SEM) in AMOS version 23. CB-SEM can be used to test theories regarding the connections between latent and observed variables. It integrates multiple regression and component analysis characteristics, enabling researchers to assess intricate models involving several dependent and independent variables simultaneously. SEM offers a comprehensive method for evaluating the direct and indirect relationship between variables compared to the basic SPSS and R packages, which cannot handle this complex relationship [89, 90].

The SEM was used to perform confirmatory factor analysis (CFA), path analysis and bootstrapping analysis. The results from CFA were used to compute the average variance extracted (AVE), maximum shared variance (MSV), and standardized loadings, which were used to determine the presence of convergent and discriminant validity of the constructs. The path analysis was carried out to assess the direct relationship between our variables, which enabled a decision to be made regarding the acceptance or rejection of the hypothesis. The indirect relationship between the variables was determined using the bootstrapping method with a bootstrap size of 5000 and a 5% confidential interval [31, 91].

All standard loadings beneath the cutoff threshold of 0.6 were excluded subsequent to a CFA. Obeng et al. [14] advised the exclusion of components with standard loadings below 0.6 from the CFA. During this process, the WE-related items (WE13 and WE14) were removed. The validity and reliability of the measurement model were improved by concentrating on items with factor loadings exceeding 0.6. This strategy improves the accuracy and robustness of the ensuing SEM analysis by ensuring that only the most dependable indicators for the structures being examined are preserved.

4. Results and Data Analysis

Table 1 meticulously presents the results of the model fitness assessment, convergent validity, normality, and internal reliability tests, underscoring the thoroughness of our research process. Figure 2 further illustrates the measurement model's outer standardized loadings.

4.1. Goodness of Fit

The model's fitness assessment was determined using the goodness-of-fit index, the Chi-square/degrees of freedom ratio, the comparative fit index (CFI), the goodness-of-fit index (GFI), the P-value, the root mean square error of approximation (RMSEA), and the adjusted GFI (AGFI). We employed the P-value, an essential component of the evaluation, along with the model's standardized regression weights and a statistical significance criterion of 0.05 [90].

The study's CMIN/df value of 3.847 is within the acceptable range, as it is less than or equal to 5, according to [32]. On the GFI scale, which ranges from 0 to 1, 1 indicates a statistically perfect match. The displayed value is 0.884 for the GFI. The values of the TLI, NFI, CFI, RMSEA, and SRMR are 0.900, 0.919, 0.938, 0.071 (<0.080), and 0.045 (<0.080), respectively. According to Atan and Obeng [90] and Tessema et al. [92], the model's fitness is within the recommended range for CMIN/df, GFI, CFI, TLI, RMSEA, and SRMR. Consequently, this provides convincing evidence that the model suits the data.

4.2. Normality Tests Assessment

The normal distribution of our dataset was rigorously assessed using skewness and kurtosis, following the established criteria set by Arhinful et al. [16] and Arhinful and Radmehr [93]. Reise et al. [94] provided a kurtosis and skewness value of ± 1.96 as a threshold for a normal distribution, a reliable criterion that our data met, demonstrating a robust and reliable dataset distribution for our research constructs. Our results for all our questions under each instrument are within the normality threshold, indicating a normal distribution associated with the dataset, allowing us to perform parametric data analysis.

4.3. Reliability Test

This study used Cronbach's alpha (α) and composite reliability to determine the reliability of item scales under each construct of WE, JS, and OCB. Table 1 reveals that all α values are above the recommended threshold of 0.70 suggested by Suryani and Tentama [95], demonstrating good internal consistency.

4.4. Convergent Validity

Convergent validity assessment involved using standardized loadings, AVE, and MSV [32]. Our purpose in determining convergent validity was to ascertain the degree to which multiple assessments yield consistent and reliable information about the concept under investigation. Once we establish convergent validity, we can use the study's results more confidently. Researchers can have greater confidence that the study's results are not just a coincidental by-product of the measurement procedure when many measures converge to support the same conclusion or hypothesis. Safdari et al. [96] and Piotrowski et al. [97] studies recommended standardized loadings exceeding 0.50, MSV being lower than the AVE, and AVE being higher than 0.50. Researchers have utilised these parameters to accurately determine the presence of convergent validity. The results obtained for the standardized loadings, AVE, and MSV were satisfied and beyond the established threshold recommended. This indicates that the constructs possess exceptional convergent validity.

Table 1.
Convergent validity, normality test and internal consistency (reliability) results.

Construct	Item	Skewness	Kurtosis	Loadings	AVE	MSV	CR	α
Work Environment	WE1	-1.103	0.988	0.696	0.730	0.650	0.915	0.942
	WE2	-1.093	0.955	0.749				
	WE3	-1.083	0.918	0.749				
	WE4	-0.888	0.735	0.788				
	WE5	-1.107	0.935	0.790				
	WE6	-1.014	0.796	0.734				
	WE7	-0.787	0.284	0.759				
	WE8	-1.226	1.572	0.759				
	WE9	-0.859	0.312	0.739				
	WE10	-0.964	0.657	0.741				
	WE11	-1.240	1.434	0.785				
	WE12	-1.177	1.452	0.821				
Organizational citizenship behavior	OCB1	-0.560	0.109	0.852	0.577	0.430	0.942	0.915
	OCB2	-0.703	0.567	0.869				
	OCB3	-0.916	0.843	0.823				
	OCB4	-0.865	0.949	0.873				
Job Satisfaction	JS1	-0.969	1.006	0.695	0.639	0.510	0.898	0.893
	JS2	-0.668	-0.216	0.808				
	JS3	-0.748	0.105	0.842				
	JS4	-0.918	0.169	0.846				
	JS5	-0.833	0.383	0.795				

CMIN/ df = 3.847, GFI = 0.884, NFI = 0.919, CFI = .938, TLI =0.900, RMSEA =0.043 and SRMR =0.045

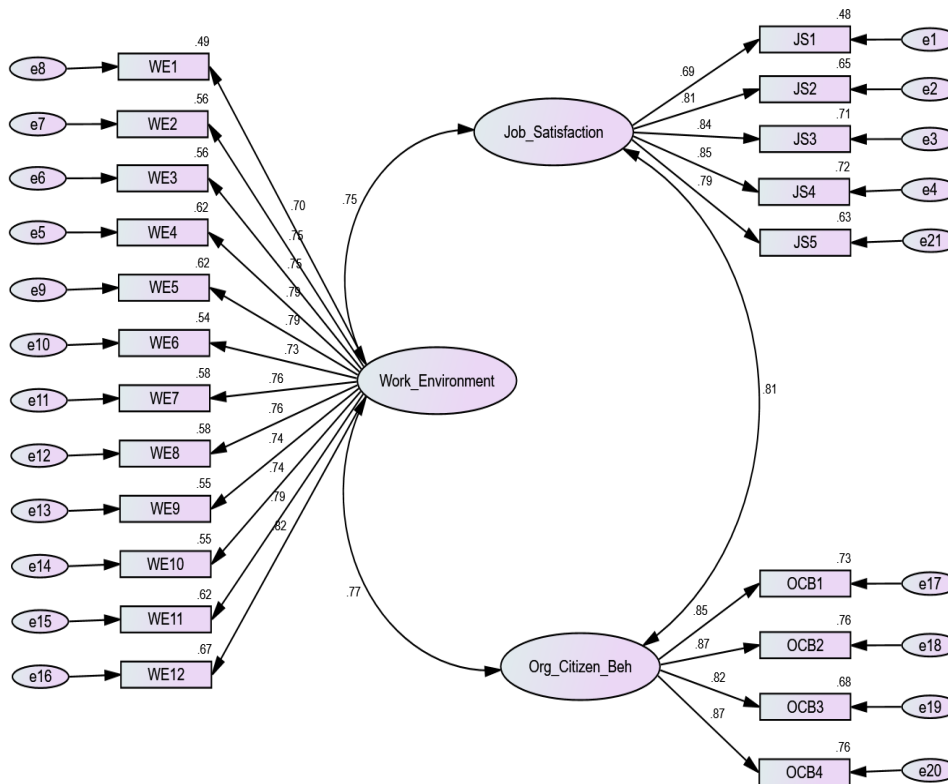


Figure 2.
Measurement model.

4.5. Discriminant Validity Test

Table 2 presents the results of our discriminant validity. The study employed the Fornell and Larcker [98] criterion to determine the presence of discriminant validity in our datasets [99]. In our research, we used the AVE square root of each construct and compared it to the correlation values of other constructs in a diagonal form. According to the Fornell-Larcker criterion, the AVE square root should be greater than the correlation values to be considered to indicate the presence of discriminant validity [85]. For instance, the AVE square root of OCB was 0.854, greater than the correlation values of WE (0.768) and JS (0.806). Also, the AVE square root of WE of 0.760 is greater than the correlation value of JS (0.753). We established that discriminant validity was present in our datasets based on the results that met the Fornell and Larcker [98]. This demonstrates that the construct is independent of the other constructs in the model and evaluates a specific feature of the underlying reality.

Table 2.
Discriminant validity.

	OCB	Work environment	Job satisfaction
Organizational citizenship behavior	0.854		
Work environment	0.768	0.760	
Job satisfaction	0.806	0.753	0.799

4.6. Hypothesis Testing

Table 3 presents the results of the direct effects of the constructs, while Figure 3 displays the bootstrapping results. This assessment involves examining structural paths to determine the study's elements statistical significance. This study tested four hypotheses.

Hypothesis 1 (H₁) examines whether the WE significantly influences OCB. The results validated this hypothesis. The results elucidated a significant and positive effect of WE on OCB ($\beta = 0.409$, $SE = 0.068$, $t = 6.001$, $P < 0.01$) with an effect size of 0.373. Consequently, H₁ was accepted.

Hypothesis 2 (H₂) ascertained whether the WE significantly influenced JS. The results confirmed this hypothesis. The outcome established a significant and positive impact of WE on JS ($\beta = 0.627$, $SE = 0.055$, $t = 11.381$, $P < 0.01$) with an effect size of 0.753. Accordingly, H₂ was accepted.

Hypothesis 3 (H₃) assessed whether JS significantly influences OCB. The results confirmed this hypothesis. The results established a significant and positive influence of JS on OCB ($\beta = 0.692$, $SE = 0.092$, $t = 7.642$, $P < 0.01$) with an effect size of 0.526. Hence, H₃ was accepted.

The R-squared value of 0.567 indicates that 56.7% of the variation in employees' OCB can be attributed to the WE. Moreover, the R-square value of .710 for OCB demonstrates that 71% of the variations in OCB can be attributed to the combined influence of WE and JS.

Table 3.
Hypothesis test results.

Path	Hypothesis	β	S.E.	t-value	Effect Size (Beta)	P-value	Decision
Organizational Citizenship Behavior <--- Work Environment	H1	0.409 ***	0.068	6.001	0.373	0.000	Accepted
Job Satisfaction <--- Work Environment	H2	0.627 ***	0.055	11.381	0.753	0.000	Accepted
Organizational Citizenship Behavior <--- Job Satisfaction	H3	0.692 ***	0.091	7.642	0.526	0.000	Accepted

R-square
Job Satisfaction (0.567)
Organizational Citizenship Behavior (0.710)
Unstandardized Coefficients (B), Standardized Coefficients (Beta)

Note: *** p<.01, ** p<.05, * p<.1.

4.7. Mediation Analysis

Table 4 displays the results of the mediation analysis. Hypothesis 4 (H4) examined the mediating role of JS in the relationship between the WE and OCB. The investigation validated this hypothesis, uncovering a partial mediation effect of JS on the relationship between WE and OCB ($\beta = 0.434$, SE = .093, $t = 4.667$, $P < 0.01$). As a result, H4 was validated and approved.

Table 4.
Indirect effect results.

	Hypothesis	β	S.E.	t-value	Confidence Interval		P	Decision
					Lower bounds	Upper bounds		
Organizational Citizenship Behavior <--Job Satisfaction <---Work Environment	H4	0.434***	0.093	4.667	0.271	0.633	0.000	Partial Mediation

Note: *** p<.01, ** p<.05, * p<.1.

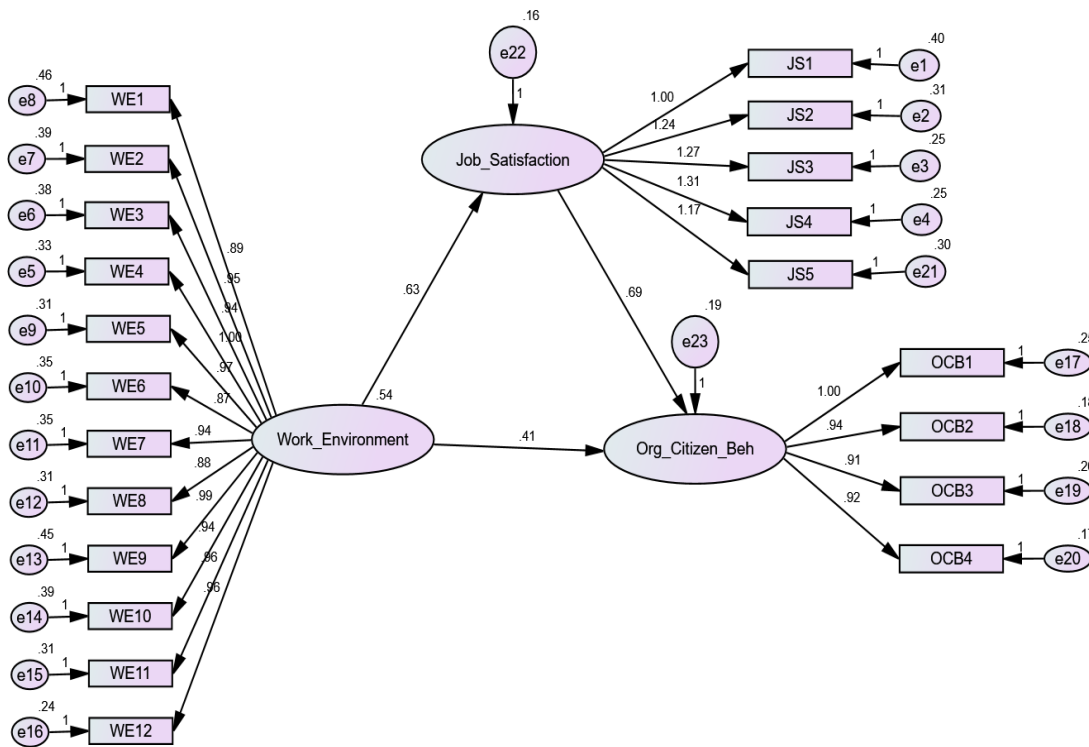


Figure 3.
Structural Model.

5. Discussions

This study examines the influence of the WE on employees' OCB while considering JS as a possible mediator in this relationship. The first hypothesis (H1) proposed that WE significantly influences OCB. The affirmation of H1 in the study's findings indicates a statistically significant and positive influence of the WE on OCB. Logically, this implies that differences in the workplace are linked to equivalent shifts in employees' involvement in OCB [100]. This study's findings align with the study conducted by Nwibere [101], who discovered a positive and statistically significant correlation between organizational justice and OCB. Organizational justice was found to have a positive and significant impact on the metrics of OCB (courtesy, altruism, civic virtue, conscientiousness, and sportsmanship). The findings of this study, in contrast, refutes the conclusions of Rinaldi and Riyanto [19] who asserted that the WE had no impact on OCB. The findings of the study provide evidence that contradicts previous beliefs, demonstrating a substantial influence of the WE on OCB within the specific setting we examined.

Further, the concept of JDR supports the findings that a positive WE promotes organizational OCB. The notion asserts that workplace resources enhance motivation and engagement, thus leading to proactive and voluntary actions, such as OCB.

Therefore, the tourism industry must invest resources in creating stimulating, innovative, and supportive workplaces. To drive employees to surpass their assigned duties, it is essential to improve interpersonal relationships, ensure access to resources and tools, and cultivate a culture of respect and appreciation.

The study's findings support the second hypothesis, which states that the WE significantly affect JS and offers valuable guidance. Hence, alterations to the WE can substantially influence JS levels [102]. An agreeable WE correlates with higher levels of individual JS, as evidenced by the Ghanaian tourism industry. This study supports Raziq and Maulabakhsh [103] assertion of a causal relationship between WE and JS in the workplace. Additionally, the findings that a positive WE increases JS support the JDR theory supports. The availability of appropriate resources alleviates stress and promotes satisfaction, both of which are critical elements of overall well-being.

Employers especially those in the tourism industry should focus on minimizing workplace pressures and improving employment resources, including equitable job distribution, autonomy, and chances for professional development. As a result, the organization's overall efficacy and employee work satisfaction will both improve.

The results showed that JS had a positive and statistically significant impact on OCB. Therefore, when employees in Ghana's tourism industry express greater job satisfaction, they are more inclined to engage in behaviors that benefit the industry [104, 105]. When individuals experience workplace satisfaction, they are more inclined to exceed the expected level of effort to contribute to the organization's success. Dyah Sawitri SE et al. [106] conducted a study investigating the effects of JS and organizational commitment on OCB. Thus, a rise in JS results in a corresponding increase in OCB. The findings of this study resonate with the outcome of Dyah Sawitri SE, et al. [106] study.

The findings of this study clearly substantiate the JDR theory, showing that job satisfaction enhances OCB. Content employees are more likely to participate in activities that enhance the business due to their heightened motivation and satisfaction. Thus, management should prioritize its improvement through initiatives such as feedback mechanisms, employee recognition programs, and transparent communication channels. Employee happiness enhances the probability of employees engaging in extracurricular activities that help the firm.

Finally, the findings revealed that JS partially mediates the relationship between the WE and OCB. This suggests that the WE directly affects OCB, but a portion of this impact is transmitted through the mediating factor of [107] confirmed that JS mediates the correlation between job characteristics and OCB. Further, Andriyanti and Supartha [108] reported that JS mediates the relationship between organizational support and OCB. Creating a positive WE directly impacts OCB and improves JS [109]. This contributes to a better understanding the relationship between WE, JS, and employee behavior in Ghana's tourism industry.

The JDR theory supports the findings that job satisfaction mediates the relationship between the work environment (WE) and organizational citizenship behavior (OCB). Workplace resources primarily impact human psychological states, including satisfaction, which in turn leads to actions such as OCB. Consequently, the Ghana tourism industry should adopt two measures to improve OCB: enhance the work environment and address the variables that directly affect job satisfaction. By administering regular employee satisfaction surveys and tailoring interventions based on the received input, organizations can improve outcomes.

6. Conclusion

This study examined the nuances of the work environment (WE) and its influence on organizational citizenship behavior (OCB), with job satisfaction (JS) acting as a mediator. The research was conducted within the Ghanaian tourism industry and was based on the Job Demands-Resources (JD-R) theory. The research yielded significant findings. The study's findings prove that the WE substantially benefits OCB and JS. This underscores the essence of establishing a collaborative and supportive work environment in the Ghanaian hotel business. In such a context, employees are more actively involved in organizational behavior change, enhancing job satisfaction.

Moreover, acknowledging JS's significant favorable influence on OCB underscores the need to consider employees' satisfaction levels when evaluating their proactivity and positive organizational contributions.

A key finding of this study is that JS has a partial role in mediating the link between WE and OCB. Therefore, high job satisfaction directly impacts OCB and mediates between the two. The findings substantially impact the administration of organizations in Ghana's hotel industry. They lay the groundwork for actions that optimize collective well-being, improve job satisfaction, and encourage positive organizational citizenship behavior in the workplace.

7. Theoretical Implications

The paper provides a theoretical contribution to enhance the understanding of organizational behavior, specifically within the framework of the JD-R paradigm. The significant and beneficial influence of the WE on OCB highlights the need to consider contextual factors while cultivating employee habits. The results align with the core tenets of the JD-R theory, emphasizing that a positive and perceivably advantageous WE can lead to good outcomes like enhanced OCB.

Moreover, including JS as a mediator in the interaction between WE and OCB adds complexity to the presented theoretical viewpoints. This illustrates the intricate correlation between job responsibilities, staff resources, and the psychological condition of JS. The results indicate that the WE shapes OCB, with the subjective judgment of JS mediating a portion of this influence. Theoretical implications emphasize the significance of adopting a holistic and unified approach to understanding employee behaviors. Understanding the dual function of the WE as a precursor to JS, which positively impacts OCB and as a catalyst for OCB itself, will be advantageous for both organizations and scholars.

8. Managerial Implications

The study's findings have significant practical and managerial consequences for professionals in the Ghanaian tourist industry and related sectors.

The study illustrates that cultivating a favorable collective mindset can lead to substantial transformations. Supervisors can exert substantial influence by prioritizing the well-being and welfare of their staff members and establishing a conducive environment that fosters both WE and OCB. Enhancing the physical working environment, fostering positive interpersonal connections, and offering skill development opportunities can all contribute to a more desirable WE.

Managers can assert control and boost morale by understanding JS' intermediate function and responding accordingly. It is feasible to recognize and tackle certain elements that lead to job contentment, such as prospects for advancement, acknowledgement, and equitable remuneration. A satisfied workforce is more likely to exhibit positive behaviors that benefit the organization, keeping managers engaged and proactive.

Managers should acknowledge the significant influence of the WE on OCB. A portion of this influence is exerted through JS's subjective experience, which directly promotes positive behaviors. Therefore, strategies to enhance OCB should include tactics to boost JS.

The results, positioned within the unique framework of the Ghanaian tourism industry, underscore the importance of interventions tailored to individual circumstances. Managers must align their strategies with their organizational context's distinct attributes and challenges. This involves considering cultural variables, industry nuances, and organizational objectives when implementing measures to enhance the WE and JS.

Leadership is pivotal in shaping the WE and enhancing JS. Managers and leaders can significantly influence the organization by adopting leadership strategies that prioritize employees' well-being, effective communication, and support. Their active involvement and the resulting content make employees more likely to demonstrate favorable OCB, empowering the leaders to make a positive impact.

9. Limitations and Direction for Future Studies

Given this study's strong results on the impact of JS as a mediator between the WE and OCB in Ghana's tourism industry, it is essential to acknowledge the limitations of the research and suggest future directions for investigation.

The use of convenience sampling may limit the generalizability of the findings to a broader population. To enhance the external validity of the findings, future research should explore the use of diverse and inclusive sampling methodologies. The study's cross-sectional technique offers a transient glimpse into the interactions at a particular moment. Longitudinal studies may provide an in-depth understanding of the evolving dynamics of WE, JS, and OCB. Using self-report measures in an online survey raises the potential for common method and response bias. Including objective metrics or employing a mixed-methods approach to strengthen future research would be beneficial. Understanding how these components change over time might offer more intricate insights into causality. A more comprehensive understanding of the mechanisms that drive the connections between WE, JS, and OCB can be achieved by combining qualitative methodologies with quantitative approaches. This would augment the accuracy and inclusiveness of the research. Subsequent investigations should examine possible limitations or factors affecting the intensity and orientation of the connections established in this study. Exploring leadership styles, organizational culture, or individual characteristics could enhance our comprehension.

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