

ISSN 2704-470X

VOLUME

5

ISSUE

2

PUBLISHED

June 2026

AJHTM

**African Journal of Hospitality
and Tourism Management**



A Journal of the **Department of Hospitality and
Tourism Management, University of Cape Coast**

**AFRICAN JOURNAL OF HOSPITALITY AND TOURISM MANAGEMENT (AJHTM)**

A publication of the Department of Hospitality and Tourism Management, University of Cape Coast

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ISSN: 2704-470X

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TABLE OF CONTENTS

Exploring the Connection: Engagement, Embeddedness, and Performance of Hotel Staff1

Miriam Tandoh, Eunice Fay Amissah

In-Service Training and Catering Officers' Performance: The Mediating Role of Service Innovation in Ghana26

Elizabeth Kafui Senya, Eunice Matey Anakwa, Isaac Ofori Asare

Analysing Destination Image under Health Risks in the Post-COVID-19 Era in Uganda43

Chris Roddy Muhango, Joseph Mpeera Ntayi, Jotham Mbiito Byarugaba, Dennis Nuwagaba, Ahmed Walugembe, Matthias Mulumba

Health and Safety Practices of Employees in Hotel and Restaurant Kitchens in Accra64

Susana Ohenewa Moreaux Kumi-Kyereme

Hospitality Managers' Perceptions of the Effect of Green Human Resource Management Practices on Progress Towards Achievement of the Sustainable Development Goals in Ghana80

Faisal Musah, Stephen Afenyo Dehlo



GUIDELINES FOR CONTRIBUTORS

Journal and scope

AJHTM is a peer-reviewed and open-access journal that seeks to;

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- promote scholarship and research collaboration among tourism and hospitality academics and professionals on the African continent and beyond.
- help bridge the gap between industry and academia by providing a forum for the exchange of ideas between the two entities.
- Provide an international forum for the discussion of a wide range of applied research relating to tourism and hospitality management in Africa.

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Research Papers and practitioner papers should not be longer than 10,000 words and not shorter than 4,000. However, reviews should not be longer than 2,000 words and not shorter than 1,000. Additionally, abstracts should not be longer than 150 words.

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- Text should be written in Times New Roman letters, font size 12, double-spaced and have at least 2.5cm (one-inch margin on all four sides.
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EXPLORING THE CONNECTION: ENGAGEMENT, EMBEDDEDNESS, AND PERFORMANCE OF HOTEL STAFF

Miriam Tandoh¹, Eunice Fay Amissah^{1}*

Abstract

This study employed the Job Embeddedness and Conservation of Resources theories to examine the significant direct and moderating effects of job embeddedness and work engagement on the job performance of hotel employees. Using an explanatory research design, a structured questionnaire was administered to 379 employees, and descriptive and inferential statistics were applied to analyse the quantitative data. The results revealed that both work engagement and job embeddedness significantly and positively affect job performance, implying that increases in these factors lead to measurable improvements in performance. However, job embeddedness alone does not significantly moderate this relationship. These findings highlight the importance of considering both job embeddedness and work engagement in human resource strategies to effectively enhance employee job performance.

Keywords: Job Embeddedness, Work Engagement, Job Performance, Hotel Employees, Ghana

INTRODUCTION

The global hospitality industry plays a pivotal role in national economic development by generating revenue and creating employment opportunities (Amissah et al, 2025). According to the World Travel & Tourism Council (WTTC, 2025), the sector supported 371 million jobs globally in 2025 and contributed one in every ten jobs, whilst contributing \$11.7 trillion (10.3% of global GDP), with a market size of \$5,524 billion growing at a 5.5% CAGR into 2026. It added 14 million net new jobs that year, contributing at least 2% of GDP in smaller economies and over 10% in larger ones.

Ghana's economy has significantly benefited from the hospitality sector (Ampofo, 2020). In 2024, it created 370,000 direct jobs (813,000 total across value chains), generated \$4.82 billion in revenue, and accounted for 5.7% of GDP, with strong domestically driven growth projected into 2025-2026 (WTTC, 2025). Hotels represent a significant component of the hospitality industry, encompassing various subcategories (Narteh, Agbemabiese, Kodua, & Braimah, 2013). Their function is indispensable for

ensuring efficient service delivery, optimising guest satisfaction, and sustaining competitiveness in the industry. However, the performance and sustainability of hotels depend largely on employees, whose engagement, commitment, and retention are vital for operational efficiency. In the Ghanaian context, and particularly in the Sekondi-Takoradi Metropolis, a rapidly growing industrial city and tourism destination, the need to ensure optimal employee performance is increasingly important, as hotels face mounting pressure from customer expectations, high competition, and fluctuating labour markets (Hervie, Tatár, & Illés, 2020). Work engagement, defined as employees' emotional and cognitive investment in their work, has been linked to improved job performance and customer service in hospitality (Bakker & Albrecht, 2018). Likewise, job embeddedness, which captures the extent to which employees are connected to and integrated within their organisation and community, has emerged as a

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Doi: 10.47963/ajhtm.v5i2.1913

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ISSN: 2704-470X



predictor of employee retention and reduced turnover (Mitchell et al., 2001).

Although these constructs are increasingly acknowledged worldwide, there is limited empirical research on how work engagement, job embeddedness, and job performance interact within Ghana's hospitality sector. Existing studies on Ghanaian hotel staff mainly explore job satisfaction, turnover intentions, and HR challenges (Deri, Zaazie, & Bazaanah, 2021; Ampofo, Owusu, Coffie, & Asiedu-Appiah, 2022; Baah & Amoako, 2011; Karatepe, 2013). Yet, the effects of engagement and embeddedness on performance outcomes warrant more examination. Hotels often face high employee turnover, low morale, and inconsistent service quality, threatening their competitiveness in a market marked by fierce rivalry and high customer expectations. Anecdotal reports indicate that, despite training programs and incentives, employee performance often falls short of international standards. This prompts critical questions about employee engagement levels and whether social and organisational bonds that promote job embeddedness are sufficiently nurtured. The Sekondi-Takoradi Metropolitan Area, influenced by oil industry fluctuations, living costs, and evolving tourism patterns, has unique community-embeddedness characteristics that could impact engagement and performance, yet these have not been empirically studied. The absence of empirical evidence on these relationships in Ghana, particularly in Sekondi-Takoradi, limits the ability of hotel managers and policymakers to design evidence-based strategies to enhance employee performance and service quality. This study, therefore, seeks to examine the interplay among job embeddedness, work engagement, and job performance among hotel employees in Sekondi-Takoradi, Ghana. Specifically,

we aim to examine the relationship between work engagement and job performance among hotel employees, investigate the influence of job embeddedness on job performance in the hospitality sector, and assess the mediating role of work engagement in the relationship between job embeddedness and job performance.

This study is significant for three reasons. First, it contributes to the limited body of knowledge on work engagement, job embeddedness, and job performance within the Ghanaian hospitality context, thereby filling a critical literature gap. Secondly, it provides practical insights for hotel managers in Sekondi-Takoradi and beyond on how to create a work environment that promotes engagement, enhances embeddedness, and ultimately drives performance. Thirdly, the findings inform policy and human resource practices within Ghana's broader hospitality and tourism sector, aligning with national goals of improving service quality, job creation, and competitiveness under the Ghana Tourism Development Plan and the African Union's Agenda 2063. By linking theory to practice, the study strengthens both academic discourse and managerial decision-making in hospitality and tourism management.

LITERATURE REVIEW

Theoretical Framework

The study is theoretically grounded in the interaction of resources and employee attachment, which together explain the dynamics of engagement, embeddedness, and performance in the hospitality sector.



The Job Embeddedness Theory

According to Yao (2004, p. 159), the embeddedness theory is the sum of factors that prevent a person from quitting his/her job. Organisational fit, links, and sacrifices are the three primary components. Organisational fit is the belief about how well-suited an employee is to an organisation (Mitchell et al., 2001). Further, an individual's level of fit inside an organisation is determined by a variety of factors, including professional goals, personal beliefs, job knowledge, needs, skills, and talents. According to Mitchell et al. (2001), a person will be more immersed at work if they are a better fit with the organisation. Organisational links, or the number of official or informal ties an employee has with the organisation, comprise the second component. Further, an employee's link to the organisation may come from relationships with groups and or coworkers. According to Mitchell et al. (2001), an employee's level of embeddedness increases with the number of relationships they have within the organisation. The third facet of job embeddedness is sacrifice. Mitchell et al. (2001) define this as the perceived loss of possible financial or psychological benefits that an individual would experience upon leaving an organisation. The loss of coworkers, worthwhile projects, promotions, retirement benefits, and "switching costs" (i.e., the loss of job stability and/or promotional chances, accrued eligibility for a pension plan, etc.) are all examples of organisational sacrifices.

In Ghana's hospitality industry, where turnover is high, job embeddedness helps explain why some employees remain despite challenges. Employees who have strong links with colleagues, feel they fit the organisational culture, and feel they would sacrifice valuable benefits if they left the organisation, are more likely to stay engaged and perform well.

Embedding employees through training, mentorship, and community support can thus be a strategic approach to reducing turnover and boosting performance.

The Conservation of Resources (COR) Theory

The Conservation of Resources (COR) theory, developed by Hobfoll (1989), provides a comprehensive framework for understanding how employees acquire, maintain, and protect valuable resources essential for well-being and job performance. Resources under this theory are categorised into personal (e.g., self-efficacy, resilience, emotional intelligence), social (e.g., support from supervisors and coworkers), and structural [e.g., job security, organisational policies, access to training] (Hobfoll, 1989; Holmgreen, Tirone, Gerhart, & Hobfoll, 2017; Törnblom & Kazemi, 2023).

The theory posits that a depletion of these resources could lead to stress and burnout, whereas accumulation fosters greater work engagement and improved performance (Timotius & Octavius, 2022). COR theory helps explain how employees cope with resource loss and maintain job embeddedness and performance (Duffour, Gbolonyo, & Chen, 2021). Social support, a key social resource, has been identified as crucial for fostering resilience and engagement among hotel employees, thereby reducing turnover intentions and enhancing organisational commitment (Clack, 2021; Owusu-Ansah, 2017).

Similarly, structural resources such as job security and access to development opportunities have been shown to mitigate stress and promote sustained performance (Hobfoll, Tirone, Holmgreen, & Gerhart, 2016). Hobfoll (2011) further emphasises that employees protect valuable resources through sacrifices that yield



positive returns, contributing to higher engagement levels. Consequently, understanding how personal, social, and structural resources interact is essential, as it helps to know how the COR theory affects employee well-being and productivity. Employees who believe they have sufficient resources in each of these areas are better able to handle job demands and deliver quality work (Nielsen, Ogbonnaya, Käsälä, Saari, & Isaksson, 2017).

The theory highlights how, in the face of threats posed by inadequate salaries, unstable employment, and unfavourable working conditions, these workers attempt to safeguard their meagre resources. For instance, in Ghana's hospitality context, marked by low pay, irregular shifts, and instability, COR explains why employees under resource threat prioritise survival (e.g., minimal effort) or seek embeddedness as a protective "resource caravan". Thus, COR underpins the idea that employees who perceive themselves as adequately resourced will exhibit higher work engagement and sustained job performance.

The integration of these theories helps explain job embeddedness through its dimensions of fit, links, and sacrifice, which together function as a bundle of organisational and social resources. Drawing on COR, job embeddedness helps employees retain and protect valuable resources, thereby reducing the risk of resource loss. Supportive workplace relationships and alignment with organisational values provide social and structural resources that encourage vigour, dedication, and absorption, the core elements of work engagement (Mitchell et al., 2001). In the context of Ghanaian hotels, where resources may be limited, low embeddedness can accelerate resource depletion, leading to burnout and turnover, while high embeddedness fosters positive resource

gain spirals that enhance task, contextual, and adaptive performance among hotel staff, as highlighted in the work of Mitchell et al. (2001).

EMPIRICAL REVIEW AND HYPOTHESES DEVELOPMENT

Work Engagement and Job Performance

Recent empirical studies within the hospitality industry consistently demonstrate a positive association between work engagement and job performance. Work engagement, characterised by vigour, dedication, and absorption, has been identified as a critical motivational state that enhances employees' effectiveness in service-oriented environments. For instance, (Gupta & Shaheen, 2023) found that transformational leadership significantly predicted employee performance through its influence on work engagement among frontline hotel employees, highlighting the importance of leader-driven resource provision in service contexts. Similarly, Karatepe and Aga (2020) reported that intrinsic job-related motivators enhance employee engagement, which subsequently promotes both in-role and extra-role service behaviours that are essential for guest satisfaction and customer loyalty.

In addition, Ampofo (2020) observed that employees who perceive their employers as supportive through the provision of tangible benefits and organisational resources are more likely to reciprocate with higher levels of engagement and improved job performance. Contemporary research further highlights emerging workplace pressures affecting engagement. For example, Kim et al. (2023) found that technology-related job stress, particularly stress associated with the adoption of artificial intelligence, negatively influences employee engagement, although psychological capital was found to mitigate this effect.



These findings suggest that organisational and personal resources remain crucial for sustaining employee engagement and maintaining performance outcomes within hospitality organisations. Based on these arguments, work engagement is expected to function as a proximal predictor of job performance in hospitality settings.

H1: Work engagement positively influences job performance among hotel employees.

Job Embeddedness and Job Performance

Research emphasises that job embeddedness (JE) serves as an important stabilising mechanism within the hospitality workforce. Job embeddedness strengthens employees' sense of compatibility with their organisation (fit), their relationships with colleagues and the community (links), and the perceived costs associated with leaving the organisation (sacrifice). Through these dimensions, employees develop a stronger attachment to their workplace, thereby reducing turnover intentions and enhancing organisational stability.

Empirical evidence supports this relationship. For instance, Wang et al. (2024) found that off-the-job embeddedness significantly reduced employees' turnover intentions through the mediating role of affective commitment, highlighting the importance of community connections in retaining service employees. Similarly, Ramaite, Rothmann, and Van der Vaart (2022) identified distinct job embeddedness profiles among hospitality employees, demonstrating how the patterns of links, fit, and sacrifice shape employees' organisational attachment and behavioural outcomes.

In addition, Karatepe and Ngeche (2012) argued that employees who receive adequate

organisational resources, such as training and development opportunities, are more likely to believe that their employer values their contributions. Consequently, they may reciprocate through higher levels of engagement and improved job performance. Conversely, when employees perceive a lack of organisational support, they may experience emotional detachment and reduced commitment to their organisation (Ampofo, 2020). Therefore, job embeddedness is expected to contribute positively to employee performance outcomes in the hospitality sector.

H2: Job embeddedness positively influences job performance among hotel employees.

Moderating Role of Job Embeddedness in the Relationship Between Work Engagement and Job Performance

Job embeddedness also plays an important moderating role in the relationship between work engagement and job performance. Scholars such as Ferreira et al. (2017) and Mitchell et al. (2001) argue that job embeddedness extends beyond traditional explanations of employee retention, offering a broader understanding of organisational behaviour. Employees who are strongly embedded within their organisations may remain committed and productive even when they experience certain job-related challenges (Yu et al., 2020).

Empirical studies further demonstrate that job embeddedness strengthens employees' access to social and organisational support, which in turn enhances their capacity to translate engagement into improved job performance (Khan et al., 2018; Kapil & Rastogi, 2020). For instance, Ibrahim et al. (2019) found that social support derived from workplace



relationships enhances the positive effects of engagement on performance. Similarly, Kapil and Rastogi (2020), as well as Vera, Martinez, and Lorente (2016), reported that embedded employees tend to demonstrate stronger performance outcomes due to the resources and support available within their organisational networks.

Consequently, job embeddedness is expected to strengthen the relationship between work engagement and job performance.

H3: Job embeddedness moderates the relationship between work engagement and job performance, such that the relationship is stronger when job embeddedness is high.

Conceptual Framework

The conceptual framework guiding this study proposes that work engagement directly influences job performance among hotel employees. In addition, job embeddedness is expected to have a direct positive influence on job performance. Furthermore, job embeddedness is proposed to moderate the relationship between work engagement and job performance, strengthening the positive effect of engagement on employee performance outcomes. The framework, therefore, positions work engagement as the primary motivational mechanism influencing employee performance, while job embeddedness functions both as a direct predictor and a contextual condition that enhances the strength of this relationship. In Ghana's hospitality sector, where employee retention and service consistency remain critical challenges, understanding these relationships offers valuable insights into strategies to improve employee commitment, engagement, and performance.

Figure 1 presents the conceptual framework illustrating the hypothesised relationships among job embeddedness, work engagement, and job performance within the hospitality sector.

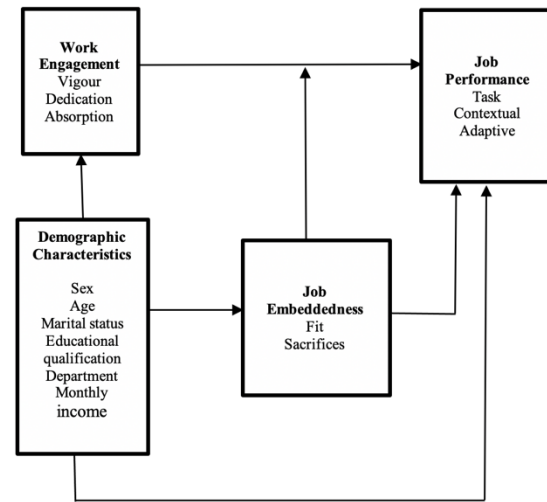


Figure 1: Conceptual Framework

METHODS

Research Approach and Design

A positivist research philosophy underpinned this study, emphasising objectivity, quantifiable observations, and hypothesis testing (Bhattacharjee, 2012; Levin, 1988). Based on this, a quantitative explanatory research design was adopted to explore the effects and relationships among work engagement, job embeddedness, and job performance. The explanatory research design was deemed appropriate for establishing causal links and laying the foundation for future studies (Zikmund et al., 2012).

Sample Size Determination

The sample size for this study was calculated utilising the Fisher, Laing, Stoeckel, and Townsend



(1998) formula. The sample size was derived as follows:

$$n = Z^2 pq / d^2$$

where:

n = desired sample size

Z = confidence level set at 95% (standard value = 1.96)

p = proportion of the target population that has similar characteristics

$$q = 1 - p$$

d = the margin of error set at 5% (standard value = 0.05)

Hence, the desired sample size calculated will be

$$n = (1.96)^2 (0.50) (0.50) / 0.05^2$$

$$n = 384$$

This approach was appropriate because reliable data on the total number of frontline employees across the selected hotels were not available. To account for possible non-response, a 6% buffer was added, increasing the total number of questionnaires distributed to 400.

Sampling Procedure

A multi-stage sampling technique was used to select respondents. First, the list of licensed star-rated hotels in the Sekondi-Takoradi Metropolitan Area obtained from the Ghana Tourism Authority (2023) directory served as the sampling frame. The metropolis was selected because it hosts a growing number of hospitality establishments in the Western Region of Ghana. In total, 37 star-rated hotels were identified, comprising three 4-star hotels, five 3-star hotels, eight 2-star hotels, and twenty-one 1-star hotels.

Second, stratified sampling was applied based on hotel star ratings to ensure representation across hotel categories. Proportional allocation was then used to distribute the sample across the strata,

resulting in 49 respondents from 4-star hotels, 76 from 3-star hotels, 119 from 2-star hotels, and 156 from 1-star hotels, giving a total target of 400 frontline employees drawn from departments such as front office, food and beverage, and housekeeping.

Finally, convenience sampling was used to select respondents within the hotels due to the irregular work schedules of frontline staff. Frontline employees from departments such as front office, food and beverage, and housekeeping were approached when they were readily available, such as during breaks, shift changes, or less-busy service periods. With the permission of the hotel management, the researchers briefly explained the purpose of the study to the employees and invited those willing to participate to complete the questionnaire. This approach enabled the recruitment of respondents who were available at the time of data collection while minimising disruption to hotel operations (Amissah, Gamor Deri, & Amissah, 2016; Gamor, Amissah, & Boakye, 2014).

Research Instrument and Pre-test

Primary data were collected through structured, self-administered questionnaires distributed to employees across star-rated hotels in the metropolis, assessing job embeddedness, work engagement, and socio-demographic traits. The questionnaire was divided into five modules, each using a four-point Likert scale. Module One examined job embeddedness using a measurement scale developed by Mitchell et al. (2001) and refined by Holtom and Inderrieden (2006), focusing on organisational sacrifice and fit. This section contained seventeen (17) items (e.g., *I foresee myself working here for a long time; I like my teammates*, etc.). Module Two assessed work engagement using



Schaufeli, Bakker, and Salanova's (2003) Utrecht Work Engagement Scale. This module consisted of sixteen (16) statements that assessed the three constructs of an employee's work engagement: vigour, dedication, and absorption (E.g., *I take my work very seriously; I feel like going to work anytime I wake up in the morning*).

Module Three assessed job performance, with nineteen (19) statements (e.g., *I take on extra work responsibilities; I always try to understand the views of my colleagues when interacting with them*) using an employee job performance scale developed by Schmitt et al. (2003), which focuses on contextual, task, and adaptive performance. The fourth module asked questions about respondents' socio-demographic characteristics, including department, education level, age, sex, marital status, and monthly income. The third component of job embeddedness (i.e., organisational links) was covered in Module Five as employee work characteristics.

A pre-test of the instrument was carried out with 25 hotel employees at one 2-star and one 3-star hotel in Cape Coast, yielding satisfactory reliability coefficients for job embeddedness ($\alpha = .906$), work engagement ($\alpha = .841$), and job performance ($\alpha = .784$).

Data Collection

The data collection was conducted between April 1 and May 6, 2024, with support from five trained field assistants. Prior to data collection, hotel managers were thoroughly informed of the purpose of the study through an introductory letter issued by the Department of Hospitality and Tourism Management at the University of Cape Coast.

Permission was sought from managers, particularly Human Resources managers, before approaching

employees during work breaks or less-busy periods. After obtaining their consent, the purpose of the study was explained to the respondents. They were then asked to complete self-administered questionnaires. Some respondents submitted their questionnaires immediately, while others requested the researcher to return later for collection. Occasionally, questionnaires were misplaced or incomplete, leading the researcher to discard those that were not fully filled out. Out of the 400 questionnaires distributed, 379 were returned, representing a 94.8% response rate. After excluding incomplete responses, 354 questionnaires were retained for the final analysis.

To maximise the response rate, the researcher collaborated closely with managers to develop a structured internal follow-up plan. This plan involved managers conducting weekly follow-ups with their employees to remind and encourage participation. Subsequently, the field assistants visited the hotels every two weeks to retrieve the completed questionnaires, maintaining a steady collection process and minimising delays.

Ethical Considerations

Ethical approval was secured from the University of Cape Coast Institutional Review Board. Key considerations, including informed consent, anonymity, and confidentiality, were carefully upheld. Participants voluntarily completed the questionnaires after being reassured of their privacy and the confidential use of their responses, which were anonymised to protect their identity. Prior to data collection, their consent was obtained, ensuring they understood that their responses would be used solely for the study.



Data Analysis

Data were analysed using descriptive statistics (frequencies, skewness, and kurtosis) to summarise the data and assess normality, and inferential techniques, including Exploratory Factor Analysis (EFA) and Partial Least Squares Structural Equation Modelling (PLS-SEM). The EFA was used to evaluate the measurement properties of the constructs and to examine factor loadings and refine measurement items. Subsequently, PLS-SEM was employed to assess both the measurement and structural models. The use of PLS-SEM was justified by its strength in handling complex models and small sample sizes, its robustness to non-normal data, and its predictive orientation (Hair, Ringle, & Sarstedt, 2011; Hair et al., 2017; Shmueli et al., 2019).

RESULTS

Socio-Demographic and Work Characteristics of Respondents

The study surveyed hotel employees in the Sekondi-Takoradi Metropolis, revealing that 53.6% were females, with the majority being young, predominantly single, and graduates of tertiary institutions (71.5%). Respondents predominantly worked in the front office departments of the hotels (44.3%), followed by the food and beverage department (31.1%) and the housekeeping department (22.0%), while those categorised in other departments (such as accounts and security) were the fewest (2.6%). The majority earned monthly salaries below GH¢1,000. The study found that 70% of hotel employees had held their current positions and worked for their current employers for 1 to 5 years. Over half (69.1%) of the respondents had 1-5 years of industry

experience. Coworker interactions were mostly limited to 1–5 coworkers (53%), and 62.3% of those (1–5 coworkers) relied on their colleagues. Team participation was also low, with 65% involved in 1-3 work teams and 59% in 1-3 committees.

The Effects of Employees' Job Embeddedness and Work Engagement on Job Performance

Table 1 presents the skewness and kurtosis of the measurement variables before the SEM analysis. According to Hair et al. (2014), a skewed data distribution is indicated by skewness values outside the range of -1 to +1, while Singh (2007) suggests that the range for kurtosis may be anywhere from -3 to +3. Table 1 shows that the kurtosis and skewness values for this study fall within the acceptable threshold. Hence, the variables in the study are normally distributed.

Table 1: Skewness and Kurtosis

Variable		Statistic	Std. Error
Job Embeddedness	Skewness	-0.760	0.125
	Kurtosis	0.427	0.250
Work Engagement	Skewness	-0.385	0.125
	Kurtosis	-0.698	0.250
Job Performance	Skewness	-0.269	0.125
	Kurtosis	-0.266	0.250

Measurement Model Assessment

The Partial Least Squares Structural Equation Modelling (PLS-SEM) analytical technique was used in the study to assess the research objectives. The following fundamental presumptions served as the foundation for the development of the measurement model: item loadings, construct validity and



reliability, convergent validity (average variance extracted), and discriminant validity. The structural model addressed the study's goal and included the coefficient of determination (R^2), significance (p-values), and path coefficients. Henseler, Ringle, and Sinkovics. (2009) states that these presumptions are put to the test in order to clearly interpret the outcomes of the structural model, including the study's validity and reliability.

Exploratory Factor Analysis

The indicator loadings for each construct were analysed to evaluate the items as the initial step in the evaluation. This step was crucial to ensure that the indicators accurately measured each construct within the study's context. As a general guideline, items with loadings of 0.70 or higher are considered accurate indicators of the relevant constructs (Henseler et al., 2009). As a result, items with loadings less than 0.70 were eliminated. This shows that, even though these items from the questionnaire or scale were taken from previously published research, they were insufficient to measure the components in this particular study. Table 2 displays the outcome.

Table 2: Factor Loadings of Job Embeddedness, Work Engagement, and Job Performance among Hotel Employees

Scale/items	Loading
<i>Job Embeddedness</i>	
M1i (This work gives me a lot of freedom)	0.732
M1j (I receive very good incentives here)	0.785
M1k (I feel my co-workers respect me here)	0.719
M1l (I would sacrifice a lot if I leave this job)	0.772

M1m (I have a good chance of getting promoted here)	0.757
M1n (I receive fair compensation for my work here)	0.710
<i>Work Engagement</i>	
M2a (Time flies fast when I am working here)	0.797
M2b (When I am working, I forget everything else around me)	0.799
M2c (I feel happy when I am busily working)	0.830
M2d (I take my work very seriously)	0.791
M2e (I get carried away when I'm working)	0.835
M2f (I find it difficult to detach myself from my job)	0.799
<i>Job Performance</i>	
M3h (I try to stay current with my work skills)	0.737
M3i (I come up with innovative ways to solve new problems)	0.792
M3k (I take an active part in discussions and/or meetings)	0.777
M3l (I always go out of my way to propose new ideas for doing things)	0.779

Table 2 indicates that to ensure the quality of the specified structures, any item loadings below 0.70 were eliminated. The variables with the highest loadings are M1j (*I receive very good incentives here*) for Job Embeddedness (0.785), M2e (*I get carried away when working*) for Work Engagement (0.835), and M3i (*I come up with creative solutions to solve new problems*) for Job Performance (0.792). These factors are the leading factors for each variable. The greatest correlations between these items and their



corresponding constructs suggest that they are the most important markers of each variable. The final model extracted from the PLS-SEM analysis served as the foundation for additional evaluation.

Construct Reliability and Validity

The results of additional evaluation criteria, including average variance extracted convergent validity, construct validity, and reliability, are shown in Table 3.

Table 3: Construct Reliability and Validity

Constructs	CA	Rho_A	CR	AVE
Job Embeddedness	0.840	0.841	0.883	0.557
Work Engagement	0.751	0.751	0.843	0.572
Job Performance	0.895	0.900	0.900	0.654

CA: Cronbach's Alpha, CR: Composite Reliability, AVE: Average Variance Extracted

Indicator reliability (IR) was evaluated using Cronbach's alpha (CA) and rho_A. IR measures the percentage of an indicator's variance attributable to its underlying latent variable (Hair, Gabriel, Silva, & Braga, 2019). Due to its reputation as a more stringent indicator of reliability metric than CA, the study reported the rho A result (Hair et al., 2019). To provide satisfactory and acceptable outcomes, it is generally recommended that Jöreskog's rho_A (ρ) values be greater than 0.70. Reliability requirements were met since all of the constructs' rho_A scores, which ranged from 0.751 to 0.900, were more than 0.70. Work Engagement (0.751), Job Embeddedness (0.841), and Job Performance (0.900) were the respective construct values.

Additionally, Table 3 presents the study's composite reliability (CR), which indicates how well

a construct is measured by its indicators (Sarstedt, Ringle, Henseler, & Hair, 2014). This indicates that a substantial correlation among all indicators attributed to a particular concept is necessary for CR. A CR score of ≥ 0.70 is the general rule of thumb (Bagozzi & Yi, 1989; Sarstedt et al., 2014). This requirement was satisfied because all constructs had CR scores greater than 0.70, with a lowest value of 0.843. This suggests that there were strong correlations between each assigned indicator and its corresponding variable.

Table 3 also presents the study's convergent validity (CV), calculated as the Average Variance Extracted (AVE) (Hair et al., 2019). The AVE indicates how the construct accounts for an indicator's variance relative to both the total variance and the variance attributable to measurement error, according to Hair et al. (2019). Bagozzi and Yi (1989) and Hair et al. (2019) recommend that AVE scores be ≥ 0.50 for each construct. Given that every construct had an AVE greater than 0.50, the study meets this requirement. In particular, the AVE scores for Job Embeddedness (0.557), Work Engagement (0.572), and Job Performance (0.654) demonstrated a satisfactory convergent validity for the measurement scale.

Discriminant Validity

As indicated by Hair et al. (2019), Table 4 tests discriminant validity to further assess the model's quality. When evaluating the structural model for collinearity, discriminant validity (DV) is assessed. The Heterotrait-Monotrait (HTMT) ratio and the Fornell and Larcker (1981) criterion are the main tools used to verify this validity. Interestingly, the HTMT ratio is considered a better indicator of discriminant validity than the Fornell and Larcker (1981) standard (Hair et al., 2019). For testing discriminant validity, Sarstedt, Ringle, Smith, Reams, and Hair (2014)



advise using the HTMT ratio. Thus, the HTMT score was used in this study to evaluate DV.

Table 4: Heterotrait-Monotrait Ratio of Correlations (HTMT) for Discriminant Validity

Constructs	Job Embeddedness	Work Engagement	Job Performance
Job Embeddedness	0.746		
Work Engagement	0.531	0.757	
Job Performance	0.429	0.453	0.809

According to Gold, Malhotra, and Segars (2001), there is an issue with discriminant validity when utilising the heterotrait-monotrait ratio of correlations (HTMT) if the HTMT value exceeds 0.90. Every value in Table 4 fell short of 0.90. Therefore, the level of discriminant validity was very high. Given how diverse these constructions are from one another and how different they should be, this is to be expected.

Model Fit

In Smart PLS, the average magnitude of differences between observed and predicted correlations is measured by the Standardised Root Mean Square Residual (SRMR), an essential metric for evaluating the fit of structural equation models (SEM). A good model fit is indicated by the SRMR score in Table 5 (0.066), further supporting the study's hypothesised linkages by suggesting a good fit between the measurement model and the real data.

SRMR values less than 0.10, or more cautiously, less than 0.08, suggest a satisfactory fit, according to Hu and Bentler (1999).

Table 5: Standardised Root Mean Square Residual (SRMR)

Measure	Saturated Model	Estimated Model
Standardized Root Mean Square Residual	0.066	0.066

Measurement Model

Figure 2 presents the final measurement model.

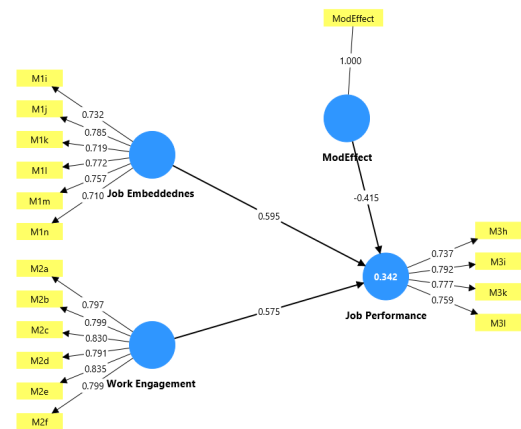


Figure 2: Measurement Model

Significance of Path Coefficients

Path coefficients are relevant in Partial Least Squares Structural Equation Modelling (PLS-SEM), which is used to analyse the structural model and reveal correlations among components. Bootstrapping is a resampling strategy where the first sample is assumed to be representative of the population (Hair et al., 2011). Using random sampling methods facilitates a more thorough assessment of the sample distribution. Nonetheless, this method is considered



suitable for tracking and confirming the accuracy of the results.

The measurement model was assessed to ensure that it met PLS-SEM standards, and then the results were discussed with respect to the objectives of the study. The study's objectives examined the direct and moderating effects of job embeddedness and employee work engagement on job performance among hotel employees within the Sekondi-Takoradi metropolis. Table 6 presents the connections among the study variables.

Table 6: Effects of Job Embeddedness and Work Engagement on Job Performance

Model	B	β	t	p
Job Embeddedness $\rightarrow$ Job Performance	0.598	0.595	4.093	0.005
Work Engagement $\rightarrow$ Job Performance	0.580	0.575	3.745	0.021
JE * WE $\rightarrow$ Job Performance	-	-	0.876	0.346
	0.421	0.415		

*Significant, $p < .001$, $R^2 = 0.342$

Effect of Job Embeddedness on the Perceived Job Performance of Hotel Employees

The first hypothesis looked at the possibility of a statistically significant effect of job embeddedness on job performance. According to the analysis, the dependent variable was job performance, while the independent variable was job embeddedness. The route coefficient from Job Embeddedness (JE) to Job Performance (JP) is considerable ($\beta = 0.595$, $p < 0.005$), as Table 6 makes clear. Furthermore, job performance is anticipated to increase by roughly 0.413 units for every unit increase in job embeddedness, according to Table 6's β coefficient of

0.595. Additionally, job embeddedness and perhaps other model-included characteristics can account for 34.5% of the variance in job performance, as indicated by the R-squared value ($R^2 = 0.342$), implying that additional factors outside the scope of this study may explain the remaining variance. The study's hypothesis, according to the results, is substantiated, i.e., employees' job embeddedness has a statistically significant impact on their job performance.

Effect of Work Engagement on the Perceived Job Performance of Hotel Employees

The second hypothesis sought to ascertain whether or not work engagement influences job performance in a statistically significant way. An examination of the path coefficient from Work Engagement (WE) to Job Performance (JP) revealed a significant effect ($\beta = 0.575$, $p < 0.05$). This demonstrates that work engagement positively affects job performance. The analysis's β coefficient of 0.575 indicates that a 1-unit increase in work engagement is associated with a predicted increase in job performance of about 0.575 units. Furthermore, it appears that work engagement and job embeddedness account for 34.2% of the variation in job performance, as indicated by the R-squared value ($R^2 = 0.342$). This suggests that the remaining variation in an employee's job performance may be explained by other variables not covered in the study.

Work engagement among hotel employees within the Sekondi-Takoradi metropolitan has a statistically significant impact on their job performance, as Table 6 demonstrates. Consequently, the study failed to reject the hypothesis.



The Moderating Effect of Job Embeddedness in the Relationship between Work Engagement and Job Performance

This study examined how job embeddedness influences the relationship between work engagement and performance. The interaction term (Job Embeddedness * Work Engagement) was included to assess whether the strength or direction of the relation between work engagement and job performance varies across levels of job embeddedness. This is shown in Figure 2 and Table 6. Based on the analysis, the interaction effect is negative but statistically insignificant ($\beta = -0.415$, $p = 0.346$). The absence of statistical significance indicates that the effect is not empirically substantiated, even though the negative coefficient points to a possible inverse moderating direction. Therefore, job embeddedness does not significantly affect the relationship between job performance and work engagement. Accordingly, job embeddedness has no bearing on the strength or direction of the association between work engagement and job performance. Although work engagement and job embeddedness independently affect job performance, job embeddedness had no discernible impact on the association between work engagement and job performance in this study.

DISCUSSION

The purpose of this study was to examine the interplay between job embeddedness, work engagement, and job performance among hotel employees in Sekondi-Takoradi, Ghana. The results provide several important insights that contribute to both theory and practice in hospitality management.

First, the finding that job embeddedness significantly predicts job performance confirms the

central assumptions of Job Embeddedness Theory (Mitchell et al., 2001). Employees who perceive stronger links with colleagues, feel that their values align with organisational culture, and recognise potential sacrifices if they were to leave, tend to invest more effort and remain productive. The study suggests that among hotel employees in the Sekondi-Takoradi metropolis, job embeddedness has a favourable and statistically significant impact on job performance. How much hotel employees in the Sekondi-Takoradi metropolis feel a part of their jobs does not significantly impact how well they carry out their tasks there. The positive path coefficient in H1 further explains the relationship between increased job embeddedness and better job performance. This aligns with recent empirical evidence in hospitality and tourism contexts (Aboramadan et al., 2021; Karatepe & Turgut, 2023), which underscores the fact that embedded employees are less distracted by turnover intentions and more focused on service delivery.

This finding also confirms observations by Khan et al. (2018), Liu (2018), Ampofo (2020), and Ampofo et al. (2022) that job embeddedness significantly impacts employee performance. Kapil and Rastogi (2017) also posited that because job embeddedness is a strong predictor of job performance, the more employees feel they fit in the organisation, the deeper their perceived relationships are, and the more embedded they will be at work. Moreover, providing job-embedded resources enables employees to invest in them, resulting in enhanced performance behaviours and more successful execution of assigned roles. This finding further reinforces the job embeddedness theory by Mitchell et al. (2001). As per the theory, job embeddedness is a concept that quantifies and identifies workplace elements that have a tendency to attach workers to



their positions, making it more challenging for them to quit. In addition, Burton et al. (2010) proposed that work embeddedness has an effect on employee retention by increasing employee engagement and performance.

Second, the study reveals that work engagement has a positive effect on job performance. This is consistent with the Job Demands–Resources (JD-R) model (Bakker & Demerouti, 2017), which posits that when employees have adequate resources—such as supportive supervision, opportunities for growth, and recognition—they experience higher levels of vigour, dedication, and absorption, which in turn enhance performance. In line with recent hospitality research (Wong et al., 2022; Kim & Li, 2023), engaged employees in the Ghanaian hotel sector demonstrate superior service quality, customer satisfaction, and efficiency. The positive path coefficient in H2 contributes to the understanding of the relationship between enhanced job performance and higher work engagement.

The findings corroborate those of Mundhra and Pramanik (2024), who found a strong correlation between employee job performance and work engagement, which means that engaged employees usually perform better. Furthermore, according to Hendrik, Fanggidae, and Timuneno (2021), work engagement positively and significantly affects employee performance, i.e., an employee's performance increases in proportion to their level of work engagement. Also, the premise that work engagement positively and significantly predicts job performance is supported by the results of an empirical study conducted by Kapil and Rastogi (2017). According to a study by Burrows et al. (2022), workers who are involved in their work will inevitably become more engaged, which will lead to better workplace

attitudes and improved performance levels. When faced with difficult circumstances at work, they will also be more proactive in their work because proactive work behaviour and work engagement are closely correlated (Lebel, 2017; Sonnentag & Starzyk, 2015).

Third, the finding that job embeddedness does not significantly moderate the relationship between engagement and performance suggests that embeddedness and engagement operate as independent predictors of performance rather than in an interactive fashion. This nuance highlights the importance of contextualising theoretical assumptions. While embeddedness provides stability and long-term orientation, engagement drives the day-to-day energy employees bring to their work. This indicates that, in this study, job embeddedness does not significantly affect the connection between job performance and engagement at work. Accordingly, job embeddedness has no bearing on the strength or direction of the association between work engagement and job performance. Although work engagement and job embeddedness independently affect job performance, job embeddedness had no discernible impact on the association between work engagement and job performance in this study.

This suggests that work engagement will consistently have a favourable impact on job performance for hotel employees, irrespective of their amount of job embeddedness. This study's outcome contradicts the conclusions of earlier research. Previous studies have discovered that an employee's job embeddedness is a special predictor of their work engagement and productivity (Khan et al., 2018; Kapil & Rastogi, 2020).

The results partially extend the Conservation of Resources (COR) theory (Hobfoll et al., 2018), suggesting that while embeddedness represents a



reservoir of retained resources, it may not amplify the motivational role of engagement in all contexts, particularly in high-turnover industries such as hospitality in sub-Saharan Africa. The theory emphasises that job embeddedness regulates the relationship between work engagement and job performance among employees. This is because hotel employees may receive support from their colleagues, which could improve their engagement at work (Kiazad et al., 2014; Lee, Xu, & Yang, 2021; Quratulain & Al-Hawari, 2021). Furthermore, according to job embeddedness theory, workers who are highly embedded in an organisation are more likely to have a range of experiences that encourage them to stay, especially in the face of potential discontent with their jobs and/or relationships with co-workers. This shows that hotel employees who get along well with their co-workers and are socially supported by them may have more personal resources, such as time and energy, available to them, enabling them to participate more fully in their jobs. Based on empirical research, employees who exhibit compatibility with their organisation and receive social support from their colleagues have been found to exhibit high levels of work engagement (Ibrahim et al., 2019; Vera et al., 2016). According to Kapil and Rastogi (2020), embeddedness improves employee work engagement and performance.

Implications for Theory and Practice

From a theoretical perspective, this study reinforces the robustness of the Conservation of Resources (COR) and Job Embeddedness theories as frameworks for predicting performance outcomes in service industries. It also provides evidence for the direct effect of job embeddedness on performance, while questioning its assumed moderating function in

the engagement–performance relationship. Thus, embeddedness should be conceptualised not only as a retention mechanism but also as a performance-enhancing construct in its own right.

In practical terms, the findings highlight the need for human resource managers in Ghana's hotel industry to focus simultaneously on strengthening embeddedness and promoting engagement. Initiatives such as mentoring programs, community-building activities, and alignment of organisational values with employee expectations can increase embeddedness. At the same time, adequate job resources, recognition, and opportunities for skill development are needed to sustain engagement. Importantly, managers should not rely on embeddedness to enhance engagement's effects; rather, they should view both as complementary drivers of performance.

Conclusion and Recommendations

This study contributes to the growing body of hospitality management research by demonstrating that job embeddedness and work engagement are important predictors of hotel employees' performance. The findings show that while work engagement enhances employees' energy, dedication, and involvement in their daily work activities, job embeddedness strengthens employees' attachment to the organisation through their sense of fit, links, and perceived sacrifice associated with leaving. The results further suggest that although both constructs positively influence performance, job embeddedness does not significantly strengthen the relationship between work engagement and job performance. This indicates that the two constructs operate through complementary but distinct mechanisms, implying that improving employee performance in the



hospitality sector requires strategies that simultaneously address both engagement and embeddedness.

The broader implication of these findings is that hospitality organisations, particularly within the Ghanaian context, where employee turnover remains relatively high, must adopt holistic human resource management approaches that focus not only on motivating employees in their immediate roles but also on strengthening their long-term attachment to the organisation. By doing so, hotels can improve service quality, sustain organisational knowledge, and maintain consistent performance levels among frontline employees. The findings therefore provide useful insights for hotel managers, HR practitioners, and policymakers seeking to enhance workforce stability and service delivery within the hospitality sector.

Based on these findings, several practical recommendations are proposed. First, hotel managers should strengthen job embeddedness strategies by promoting strong workplace relationships, encouraging teamwork, and promoting organisational values that align with employees' personal and professional goals. Creating opportunities for career development, mentoring, and internal promotion can also enhance employees' sense of fit and increase the perceived costs associated with leaving the organisation.

Second, organisations should implement initiatives that promote work engagement by providing adequate job resources. These may include supportive leadership practices, regular feedback, employee recognition programmes, and opportunities for skills development. In addition, creating a positive work climate through team-building activities, open communication, and participatory decision-making

can enhance employees' motivation and commitment to service delivery.

Third, hotels should develop context-specific human resource policies that address the unique challenges of Ghana's hospitality sector. Such policies may include structured training and development programmes, transparent promotion and career progression policies, employee welfare and work-life balance initiatives, and fair reward and recognition systems. Implementing clear policies on employee support, mentoring for early-career staff, and retention incentives can further strengthen employees' attachment to their organisations and reduce turnover intentions.

Overall, by integrating policies that simultaneously promote work engagement and job embeddedness, hospitality organisations can enhance employee performance, improve service quality, and sustain long-term organisational competitiveness within Ghana's growing tourism and hospitality industry.

Limitations and Suggestions for Future Research

This study is not without limitations. First, the use of a cross-sectional quantitative design limits the ability to infer causality among work engagement, job embeddedness, and job performance. While statistically significant associations were found, it remains unclear whether these relationships hold over time or whether reverse causality may exist. Future studies could employ longitudinal or experimental designs to establish stronger causal inferences.

Second, the study relied exclusively on self-reported data from hotel employees, which may be subject to common method bias and social desirability effects. Although procedural remedies were applied to minimize bias, the use of multi-source data (e.g., supervisor ratings of employee performance or



customer satisfaction indices) would provide a more robust picture of the engagement–embeddedness–performance nexus.

Third, the study was conducted among 379 hotel employees in Sekondi-Takoradi, Ghana, which, although adequate for quantitative analysis, may limit the generalisability of the findings. Regional, cultural, and organisational variations within Ghana's broader hospitality sector may produce different dynamics. This study should be replicated in other regions or across different types of hospitality establishments (e.g., resorts, restaurants, airlines).

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IN-SERVICE TRAINING AND CATERING OFFICERS' PERFORMANCE: THE MEDIATING ROLE OF SERVICE INNOVATION IN GHANA

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Abstract

Training is a cornerstone of service delivery excellence, yet the mechanisms through which in-service training influences employee performance in the hospitality and catering sector remain underexplored, particularly in sub-Saharan Africa. This study examines the impact of in-service training on catering officers' performance in Greater Accra, Ghana, with service innovation performance as a mediating variable. Drawing on Social Exchange Theory and the Ability-Motivation-Opportunity (AMO) framework, a survey-based design was employed, yielding 284 usable responses from frontline hospitality and catering employees. Data were analysed using confirmatory factor analysis (CFA) and structural equation modelling (SEM) with maximum-likelihood estimation in AMOS 23.0. The findings reveal significant positive relationships between employees' perceived access to training, perceived benefits of training, and perceived support for training and their overall job performance. Service innovation performance was found to partially mediate the relationships between access to training, benefits of training, and employee performance, while fully mediating the relationship between support for training and performance. These results carry important implications for human resource management practice and theory in the Ghanaian hospitality context, underlining the need for organisations to invest in structured, innovation-oriented training programmes.

Keywords: In-Service Training, Service Innovation, Employee Performance, Catering Services, Hospitality Management

INTRODUCTION

Contemporary organisations operate in an environment of rapid change, intensifying competition, and rising customer expectations. In response, training and development have emerged as strategic tools for enhancing employee capability and sustaining organisational competitiveness (Kombo & Kakuba, 2020). Effective employee training produces high-calibre personnel capable of driving organisational growth, as it equips individuals with the knowledge, skills, and attitudes necessary to fulfil their assigned roles (Fan & Wei, 2010). This is particularly pertinent in the hospitality and catering industry, where service quality is the primary differentiator and customer satisfaction depends heavily on the skills and attitudes of frontline staff.

Training in organisations takes diverse forms. Campbell and Kuncel (2001) identified training as one of the most impactful human resource development (HRD) interventions for sustaining organisational effectiveness. Jacobs (2014) distinguishes between formal off-the-job training, such as classroom and online programmes, and on-the-job training, which occurs within the work environment itself. The latter, often referred to as in-service training, is particularly valuable because it allows employees to acquire context-specific skills without disrupting workflow (Ahadi & Jacobs, 2017; Dinero, 2005). In-service training has been associated with higher employee retention, improved performance, and enhanced job satisfaction across various service industries.

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Doi: 10.47963/ajhtm.v5i2.1660



The hospitality industry encompasses a diverse workforce ranging from general managers to frontline service personnel such as chefs, waitstaff, receptionists, concierge staff, and catering officers. Given that these employees collectively represent the service culture of an establishment, systematic in-service training is critical not only for maintaining operational standards but also for fostering the innovative service practices that distinguish high-performing organisations (Mirrezaei et al., 2018; Ahmadi, 2014). For catering staff specifically, regular training on personal hygiene, food safety, and customer service standards is essential for preventing service failures and upholding organisational reputation in an increasingly competitive market.

Employee job performance is known to be influenced by multiple factors, including training, motivation, and organisational support (Saeed & Asghar, 2012; Iqbal et al., 2020). Training provides employees with the competencies needed to execute their duties effectively and supports a sense of professional development that reinforces organisational commitment (Donkor & Banki, 2017). In the hospitality and catering sector, the motivation for in-service training extends beyond individual skill development to encompass the cultivation of an innovative service culture capable of responding to evolving customer demands.

Despite the well-documented importance of training in the hospitality literature, relatively little research has examined the role of service innovation performance as a mechanism through which training shapes employee outcomes in the Ghanaian context. While studies such as Dhar (2015) and Shen and Tang (2018) have explored indirect training-performance relationships and the influence of training dimensions on service quality, none, to the authors' knowledge,

has investigated the mediating role of service innovation performance in the relationship between in-service training and catering staff performance in Ghana. This gap is significant given the growing contribution of the hospitality and catering sector to Ghana's economy and the persistent challenges of underinvestment in employee development (ILO, 2020).

Against this backdrop, the present study addresses the following research questions: How do perceived access to training, perceived benefits of training, and perceived support for training influence service innovation performance and catering staff performance? Does service innovation performance mediate the relationship between training dimensions and catering staff performance? The general objective of the study is to examine the mediating role of service innovation performance in the relationship between in-service training and catering officers' performance in Ghana's hospitality and catering industry.

LITERATURE REVIEW

Theoretical Framework

This study is grounded in Social Exchange Theory (SET) and the Ability-Motivation-Opportunity (AMO) framework. SET posits that social exchanges between organisations and employees are governed by norms of reciprocity: when an organisation invests in employee development, employees are likely to reciprocate through increased commitment, effort, and performance (Blau, 1960; Bashir & Long, 2015). Training and development opportunities provided by employers represent a meaningful organisational investment that employees interpret as evidence of care for their wellbeing and recognition of their contributions (Aryee, Budhwar & Chen, 2002;



Mansour et al., 2022). In turn, employees who perceive this investment as genuine are motivated to engage more fully in their work and to perform at higher levels (Newman et al., 2011; Arasanmi & Krishna, 2019).

The AMO framework complements SET by specifying that employee performance is a function of three distinct factors: the ability to perform (skills and knowledge), the motivation to perform (intrinsic and extrinsic incentives), and the opportunity to perform (organisational support and resources) (Ocen, Francis & Angundaru, 2017). In-service training directly enhances employee ability by building job-relevant skills and knowledge. It also bolsters motivation by signalling that the organisation values employees' professional growth. Finally, perceived organisational support for training creates opportunities for employees to translate newly acquired skills into improved performance. Together, SET and the AMO framework provide a robust theoretical basis for hypothesising that training dimensions positively influence both service innovation performance and employee job performance.

The present study adapts this dual-theoretical lens to the Ghanaian hospitality context, examining how perceived access, benefits, and support for training interact with service innovation performance to shape catering staff outcomes. In doing so, it responds to calls by scholars such as Dhar (2015) and Shen and Tang (2018) for research that explores the mechanisms linking training investment to performance outcomes in service organisations.

Research Hypotheses

Perceived access to training and catering staff performance

Access to training refers to the extent to which employees perceive that they have adequate opportunities to acquire new knowledge, skills, and competencies relevant to their roles (Waqanimaravu & Arasanmi, 2020). When employees believe they have genuine access to both on-the-job and off-the-job training, they are more likely to participate in development activities and to apply newly acquired skills in their work (James & Waldron, 2011). In the hospitality and catering context, access to training on customer service standards, food safety, and operational protocols enables frontline employees to deliver consistent, high-quality service.

Empirical evidence supports a positive relationship between perceived access to training and employee performance. Studies by Brunetto, Farr-Wharton and Shacklock (2012), Ehrhardt et al. (2011), and Teck-Hong and Yong-Kean (2012) have consistently shown that when employees perceive they have access to relevant training, their job performance improves significantly. Drawing on SET, access to training can be interpreted as an organisational investment that employees reciprocate through enhanced performance. Accordingly, the following hypothesis is proposed:

Hypothesis 1: Perceived access to training is positively associated with catering staff performance.

Perceived benefits of training and catering staff performance

Perceived benefits of training refers to employees' assessments of the positive individual, job-related, and career outcomes they expect to derive from participating in training programmes (Nordhaug, 1989; Yang, Sanders & Bumatay, 2012). When



employees believe that training will enhance their skills, improve their job prospects, and contribute to their professional development, they are more likely to engage with training activities and to translate the learning into performance improvements (Noe & Wilk, 1993; Tooksoon, 2011).

Research consistently shows that the perceived benefits of training strengthen employees' affective commitment to their organisations and positively influence their performance (Al Emadi & Marquardt, 2007; Memon et al., 2016). When employees view training as a genuine investment in their development, they are motivated to perform at higher levels as part of the reciprocal exchange relationship described by SET (Abd Rahman et al., 2013; Dirani, 2012). This relationship is especially salient in the hospitality and catering industry, where service quality is directly tied to employee competence and motivation. Therefore:

Hypothesis 2: Perceived benefits of training are positively associated with catering staff performance.

Perceived support for training and catering staff performance

Perceived support for training encompasses the extent to which employees believe their organisation provides them with the resources, encouragement, and opportunities necessary to participate in training and to apply newly acquired skills in the workplace (Waqanimaravu & Arasanmi, 2020). Organisational support signals to employees that their development is valued, which, according to SET, motivates employees to reciprocate through greater organisational commitment and performance (Ocen et al., 2017; Teck-Hong & Yong-Kean, 2012).

Empirical studies have demonstrated that perceived training support positively influences employee

performance across various industries, including hospitality (Ahmad & Bakar, 2003; Bartlett, 2001; Park, Kang & Kim, 2018). In the catering context, employees who receive management support for training are more likely to engage in skill development activities, maintain high service standards, and contribute to organisational innovation. As such, the following hypothesis is advanced:

Hypothesis 3: Perceived support for training is positively associated with catering staff performance.

Training dimensions and service innovation performance

Service innovation performance refers to an employee's ability to introduce or implement new ideas, processes, or service improvements within their work environment (Hu, Horng & Sun, 2009; Rogers, 2003). In the hospitality and catering sector, innovation is a critical driver of competitiveness, enabling organisations to differentiate their offerings, respond to changing customer preferences, and improve operational efficiency (Chang, Gong & Shum, 2011; Ottenbacher & Gnoth, 2005).

Training is a primary enabler of service innovation. When employees have access to training, perceive clear benefits from it, and feel supported in their development, they are better equipped to generate and implement innovative service practices (Dhar, 2015; Chen, 2017). Chang et al. (2011) demonstrated that extensive training of frontline employees is particularly important for fostering innovation in hospitality organisations. Similarly, Shen and Tang (2018) found that training factors, including access and perceived support, positively influence innovation-related outcomes. Based on these



theoretical and empirical foundations, the following hypotheses are proposed:

Hypothesis 4: Perceived access to training is positively associated with service innovation performance.

Hypothesis 5: Perceived benefits of training are positively associated with service innovation performance.

Hypothesis 6: Perceived support for training is positively associated with service innovation performance.

The mediating role of service innovation performance

The potential for service innovation performance to mediate the training-performance relationship is grounded in both SET and the AMO framework. Training enhances employee ability and motivation, which in turn stimulates innovative behaviours in the workplace. These innovative behaviours, reflected in service innovation performance, subsequently contribute to improved overall job performance. This sequential process suggests that service innovation performance serves as a mechanism through which training investments translate into performance outcomes.

Chang et al. (2011) highlighted the importance of examining how human resource management practices, including training, foster innovation in hospitality firms, while Hu, Horng and Sun (2009)

found that knowledge sharing facilitated by training positively influences service innovation performance. Chen (2017) provided direct evidence that training-related perceptions influence service innovation performance in the hospitality sector. Collectively, this body of evidence supports the proposition that service innovation performance mediates the relationship between training dimensions and catering staff performance. Accordingly:

Hypothesis 7: Service innovation performance mediates the positive relationship between perceived access to training and catering staff performance.

Hypothesis 8: Service innovation performance mediates the positive relationship between perceived benefits of training and catering staff performance.

Hypothesis 9: Service innovation performance mediates the positive relationship between perceived support for training and catering staff performance.

Figure 1 presents the conceptual framework for the study. The three training dimensions (perceived access, perceived benefits, and perceived support) are hypothesised to exert direct effects on catering staff performance (H1–H3) and on service innovation performance (H4–H6). Service innovation performance, in turn, is hypothesised to mediate the relationships between the three training dimensions and catering staff performance (H7–H9). Dotted lines represent the hypothesised mediation pathways.

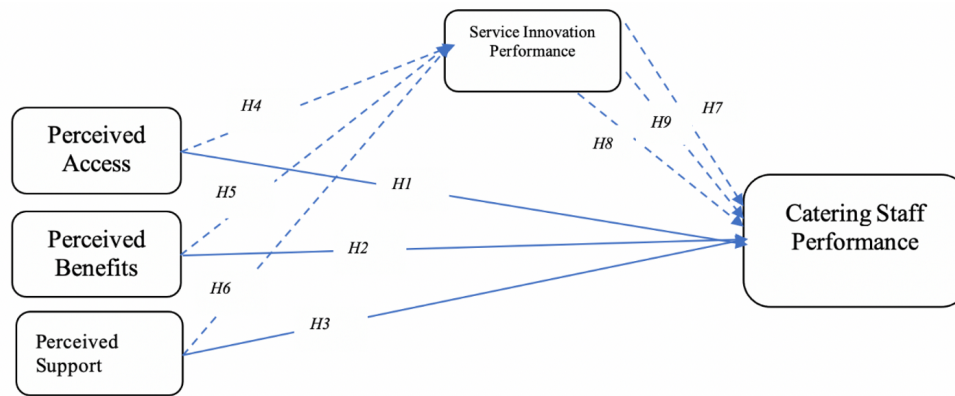


Figure 1: Conceptual Framework for the Study

METHODOLOGY

Research Design and Sampling

A quantitative, cross-sectional survey design was employed, consistent with prior studies examining training and performance relationships in the hospitality sector (Dhar, 2015; Shen & Tang, 2018). A convenience sampling approach was adopted, given the practical constraints of accessing frontline hospitality and catering employees in Greater Accra, Ghana. Participation was entirely voluntary.

The sampling frame comprised frontline employees across hotels, restaurants, event catering companies, and related hospitality service providers in Greater Accra. These segments were selected to capture a diverse range of roles and experiences within the industry, enabling a comprehensive examination of training practices, staff performance, and service innovation. The study initially contacted 420 potential participants, of whom 379 agreed to participate. A total of 284 completed and usable questionnaires were returned, yielding an effective response rate of 67.6% (284 out of 420 initially contacted), reflecting a

satisfactory level of participation for SEM-based research.

Participants and Eligibility Criteria

Participants were frontline employees directly involved in customer-facing roles within the hospitality and catering industry. These roles included waitstaff, kitchen staff, concierge personnel, receptionists, and catering officers. To ensure that participants had relevant experience with in-service training and service delivery, the following eligibility criteria were applied:

- The individual was currently employed as a catering officer or in a frontline hospitality role in Ghana.
- The individual had received in-service catering or hospitality training within the past year.
- The individual had been involved in implementing or contributing to catering or service innovation initiatives in their workplace.

Prospective participants who did not meet all three criteria were excluded from the study. These screening



questions were administered at the outset of the survey to ensure sample integrity.

Research Instrument

Data were collected using a structured self-administered questionnaire comprising two sections. The first section gathered demographic information, including gender, age, educational level, marital status, and years of work experience. The second section measured the study's core constructs using established scales adapted from prior literature.

Perceived access to training and perceived support for training were measured using items adapted from Dhar (2015), with 12 items for perceived access and six items for perceived support. Perceived benefits of training were measured using items adapted from Nordhaug (1989) and Yang et al. (2012). Service innovation performance was assessed using six items from Hu, Horng and Sun (2009), adapted to reflect hospitality and catering contexts. Catering staff performance was measured using four items from Wongleedee (2020). All items were rated on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). A total of 23 items were included across the five constructs.

Data Analysis

Data were analysed using IBM SPSS Version 26.0 and AMOS 23.0. Descriptive statistics, including means, standard deviations, and Pearson correlations, were computed to characterise the sample and examine bivariate relationships among constructs. Internal consistency was assessed using Cronbach's alpha, with a threshold of 0.70. Skewness and kurtosis values were examined to evaluate the normality of the data distribution.

Confirmatory factor analysis (CFA) was conducted to assess the measurement model, including construct reliability and validity. Composite reliability (CR) and average variance extracted (AVE) were used to evaluate convergent validity, following Hair et al. (2010), while the Fornell and Larcker (1981) criterion was applied to assess discriminant validity. Model fit was evaluated using a range of indices: chi-square to degrees-of-freedom ratio (chi-square/df), goodness-of-fit index (GFI), adjusted goodness-of-fit index (AGFI), comparative fit index (CFI), normed fit index (NFI), root mean square error of approximation (RMSEA), and standardised root mean square residual (SRMR).

Following the CFA, structural equation modelling (SEM) with maximum likelihood estimation was used to test the hypothesised direct and indirect relationships. Mediation effects (Hypotheses 7-9) were assessed by examining the indirect effects of training dimensions on catering staff performance via service innovation performance. To improve interpretability, direct and indirect effects are presented in separate tables.

RESULTS

Demographic Profile of Participants

The sample comprised 284 frontline hospitality and catering employees. Females constituted 80.99% of the sample, with males representing 19.01%. Regarding age, 11.27% were aged 18-20 years, 14.44% were aged 21-30 years, 30.63% were aged 31-40 years, 23.59% were aged 41-50 years, and 14.44% were aged 51-60 years, with 5.63% aged above 60 years. In terms of educational attainment, 33.80% were secondary school leavers, 36.62% held technical or vocational qualifications,



22.89% had completed tertiary education, and 6.69% held postgraduate qualifications. The majority of respondents had between 10 and 19 years of work experience. Regarding marital status, 34.51% were single and 65.49% were married.

Confirmatory Factor Analysis

Table 1 presents the descriptive statistics and bivariate correlations for the study's constructs. The first analytical step involved assessing the measurement model via CFA to establish construct validity and reliability prior to structural model testing.

Table 1: Descriptive Statistics and Correlations (N = 284)

	Variable	Mean	SD	1	2	3	4	5
1	Service innovation performance	3.94	0.06*	1.000				
2	Benefits from training	3.26	0.24	0.075	1.000			
3	Support for training	3.79	0.17	0.305	0.376	1.000		
4	Catering staff performance	3.85	0.07*	0.122	-0.033	0.302	1.000	
5	Access to training	3.93	0.10	0.148	0.209	0.354	0.449	1.000

Construct Reliability and Validity

Table 2 presents the reliability and validity results for all constructs. Cronbach's alpha and composite reliability (CR) values exceeded the recommended threshold of 0.70 for all constructs (Hair et al., 2010), confirming acceptable internal consistency. All standardised factor loadings ranged from 0.616 to 0.922, exceeding the recommended minimum of 0.50, thereby establishing convergent

validity (Anderson & Gerbing, 1988; Bagozzi & Yi, 1988). Table 3 presents the discriminant validity results, showing that the AVE values in the diagonal exceeded the squared inter-construct correlations in all cases, consistent with the Fornell and Larcker (1981) criterion. These results confirm that the measurement model exhibits satisfactory reliability, convergent validity, and discriminant validity, with common method bias unlikely to be a significant concern

Table 2: Construct Reliability, AVE, and Factor Loadings

Item	CR	AVE	Cronbach α	Factor Loading
Service Innovation Performance				
SIP3	0.927	0.679	0.927	0.803
SIP4				0.799
SIP5				0.833
SIP6				0.824
SIP7				0.841
SIP8				0.843
Benefits from Training				
BT3	0.910	0.671	0.911	0.673



BT4				0.769
BT5				0.832
BT6				0.892
BT7				0.908
Support for Training				
ST2	0.872	0.630	0.761	0.858
ST3				0.765
ST4				0.755
ST5				0.794
Catering Staff Performance				
SCP2	0.881	0.652	0.878	0.853
SCP3				0.922
SCP5				0.743
SCP7				0.691
Access to Training				
AT1	0.833	0.558	0.829	0.748
AT2				0.731
AT3				0.872
AT4				0.616

Note: CR = Composite Reliability; AVE = Average Variance Extracted.

Table 3: Discriminant Validity (Fornell-Larcker Criterion)

Construct	1	2	3	4	5
1 Service innovation performance	0.679				
2 Benefits from training	0.075	0.671			
3 Support for training	0.305	0.376	0.630		
4 Staff performance	0.122	0.033	0.302	0.652	
5 Access to training	0.148	0.209	0.354	0.449	0.558

Note: Bold diagonal values represent AVE for each construct. Off-diagonal values are squared inter-construct correlations. All correlations significant at $p < 0.01$.

Structural Equation Model Fit

Table 4 presents the model fit indices for the CFA. The results indicate a satisfactory model fit: chi-square/df = 1.541 (within the recommended range of 1 to 3), CFI = 0.970 (above the 0.95 threshold), GFI = 0.957, AGFI = 0.888 (marginally below the 0.90

threshold, indicating an acceptable but not excellent fit on this index), NFI = 0.926, SRMR = 0.049, and RMSEA = 0.044. Taken together, these indices confirm that the overall model fit is acceptable, supporting the suitability of the measurement model for subsequent structural analysis

**Table 4: Summary of Model Fit Indices**

Measure	Estimate	Threshold	Interpretation
Chi-square	339.128	--	--
df	220	--	--
chi-square/df	1.541	1 to 3	Excellent
CFI	0.970	> 0.95	Excellent
GFI	0.957	> 0.97	Acceptable
AGFI	0.888	> 0.90	Acceptable (marginally below threshold)
NFI	0.926	> 0.95	Acceptable
SRMR	0.049	< 0.08	Excellent
RMSEA	0.044	< 0.06	Excellent
PClose	0.870	> 0.05	Excellent

Note: Model values meeting the threshold signify an acceptable fit.

Hypotheses Testing: Direct Effects

Table 5 presents the direct and indirect path estimates from the structural model.

Table 5: Direct and Indirect Path Estimates

H	Path	Direct Effect (beta)	Partial Mediation (beta)
H1	Access to training -> Staff performance	0.506***	0.410 (5.905***)
H2	Benefits from training -> Staff performance	0.188***	0.186 (-2.955**)
H3	Support for training -> Staff performance	0.190***	0.241 (3.471***)
H4	Access to training -> Service innovation	0.192***	0.755 (13.806***)
H5	Benefits from training -> Service innovation	0.284***	0.765 (14.414***)
H6	Support for training -> Service innovation	0.264***	0.296 (4.089***)
--	Service innovation -> Staff performance	--	0.003

*Note: **p < 0.01; ***p < 0.001. Beta values are standardised path coefficients.*

Hypothesis 1 proposed a positive relationship between perceived access to training and catering staff performance. The structural model confirmed this relationship (beta = 0.506, $p < 0.001$), supporting Hypothesis 1. This finding indicates that when employees perceive they have ready access to relevant training opportunities, their job performance improves in a practically meaningful way. Hypothesis 2 proposed a positive relationship between perceived

benefits of training and catering staff performance. The result supports this hypothesis (beta = 0.188, $p < 0.001$), indicating that employees who believe training offers tangible personal, job-related, and career benefits perform at higher levels. Hypothesis 3 proposed a positive relationship between perceived support for training and catering staff performance. The result confirms this hypothesis (beta = 0.190, $p < 0.001$), showing that management and organisational



support for training substantially enhances employee performance.

Hypotheses 4, 5, and 6 proposed positive relationships between the three training dimensions and service innovation performance. Results confirmed a significant positive relationship between perceived access and service innovation performance (H4: $\beta = 0.192$, $p < 0.001$), between perceived benefits and service innovation performance (H5: $\beta = 0.284$, $p < 0.001$), and between perceived support and service innovation performance (H6: $\beta = 0.264$, $p < 0.001$), supporting all three hypotheses.

Hypotheses Testing: Indirect Effects (Mediation)

Hypotheses 7, 8, and 9 examined the mediating role of service innovation performance in the training-performance relationship. The indirect effect of perceived access to training on staff performance via service innovation performance was 0.001312 (0.410×0.003), supporting Hypothesis 7. Service innovation performance thus partially mediates this relationship, given that the direct effect of perceived access remains significant. The indirect effect of perceived benefits of training on staff

performance via service innovation performance was 0.0006 (0.186×0.003), supporting Hypothesis 8 and again indicating partial mediation. The indirect effect of perceived support for training on staff performance via service innovation performance was 0.0008 (0.241×0.003), supporting Hypothesis 9. In this case, service innovation performance was found to fully mediate the relationship between perceived support and staff performance, as the direct path became non-significant when the mediator was included.

It is noted that the magnitude of the indirect effects is small in absolute terms on a five-point scale. Researchers should interpret these mediation effects with appropriate caution and consider whether the current measurement of service innovation performance adequately captures the conceptual breadth of this construct. Future studies with larger samples and refined measures may yield more robust indirect effects. Authors are also strongly encouraged to reconcile any discrepancies between the path coefficients reported in Table 5 and those depicted in any structural model figure (Figure 3 in the original manuscript) before final submission, as inconsistencies between tabular and graphical results undermine confidence in the reported findings.

Table 6: Summary of Hypotheses Results

Hypothesis	Relationship	Result
H1	Perceived access to training -> Catering staff performance	Supported
H2	Perceived benefits of training -> Catering staff performance	Supported
H3	Perceived support for training -> Catering staff performance	Supported
H4	Perceived access to training -> Service innovation performance	Supported
H5	Perceived benefits of training -> Service innovation performance	Supported
H6	Perceived support for training -> Service innovation performance	Supported
H7	Service innovation mediates access -> Staff performance	Partially supported
H8	Service innovation mediates benefits -> Staff performance	Partially supported
H9	Service innovation mediates support -> Staff performance	Fully supported



DISCUSSION

This study examined the role of in-service training on the performance of catering officers in Ghana's hospitality and catering industry, with service innovation performance as a mediating variable. Drawing on Social Exchange Theory and the AMO framework, the study tested nine hypotheses using survey data from 284 frontline employees in Greater Accra. The findings offer several important contributions to the literature on training, innovation, and employee performance in the hospitality sector.

The finding that perceived access to training is positively and significantly associated with catering staff performance (H1 supported) is consistent with prior studies (Brunetto et al., 2012; Ehrhardt et al., 2011; Teck-Hong & Yong-Kean, 2012). When employees have access to relevant training opportunities, they develop the skills and confidence needed to perform their roles effectively, reinforcing the propositions of both SET and the AMO framework. This result underscores the importance of ensuring equitable access to in-service training across all employee levels within the hospitality and catering industry.

Similarly, the positive relationship between perceived benefits of training and staff performance (H2 supported) aligns with findings by Al Emadi and Marquardt (2007) and Memon et al. (2016). Employees who perceive clear individual, job-related, and career benefits from training are more motivated to engage in development activities and to channel their learning into improved performance. The result for perceived support for training (H3 supported) echoes findings by Ahmad and Bakar (2003), Park, Kang and Kim (2018), and Bartlett (2001), confirming that managerial and organisational support for training

is a key driver of employee performance in hospitality settings.

The significant positive relationships between all three training dimensions and service innovation performance (H4-H6 supported) are consistent with Chang et al. (2011) and Chen (2017), who demonstrated that training practices stimulate innovative behaviour among frontline employees. These findings suggest that training does not merely reinforce existing skills but actively cultivates employees' capacity to think creatively and introduce service improvements, a capability that is increasingly important in Ghana's competitive hospitality market.

The mediation findings (H7-H9 supported) are theoretically significant, demonstrating that service innovation performance serves as a mechanism through which training investments are translated into performance outcomes. Partial mediation for access and benefits dimensions indicates that training influences performance both directly and indirectly, through the stimulation of innovative behaviours. Full mediation for the support dimension suggests that the performance-enhancing effects of training support are primarily channelled through employees' engagement in service innovation, rather than through direct skill application alone.

These findings make a distinctive contribution to the hospitality and human resource management literatures by establishing a training-innovation-performance chain in the Ghanaian context, a setting that has received limited empirical attention despite its growing economic significance. The study also extends SET and the AMO framework to the specific context of catering officer performance in sub-Saharan Africa, validating their applicability in a developing economy setting.



CONCLUSIONS

This study examined the impact of in-service training on catering officers' performance in Greater Accra, Ghana, with service innovation performance as a mediating variable. Using SEM with data from 284 frontline hospitality and catering employees, all nine hypothesised relationships received empirical support. The three dimensions of in-service training, namely perceived access, perceived benefits, and perceived support, were each positively associated with catering staff performance and with service innovation performance. Service innovation performance was found to partially mediate the relationships between perceived access and benefits of training and staff performance, while fully mediating the relationship between perceived support for training and staff performance.

These findings make a distinctive contribution to knowledge by establishing the mediating role of service innovation performance in the training-performance relationship within a sub-Saharan African hospitality context. This study extends previous research by examining this pathway in the under-researched Ghanaian hospitality context.

Practical Implications

The findings carry several important practical implications for managers and policymakers in Ghana's hospitality and catering sector. First, the positive relationship between training access, benefits, and support and employee performance underscores the need for systematic investment in structured in-service training programmes. Organisations should allocate dedicated budgets for training and ensure that all frontline employees, regardless of role or seniority, have equitable access to development opportunities.

Second, the mediating role of service innovation performance highlights the value of designing training programmes that explicitly incorporate innovation competencies, such as creative problem-solving, customer-centric thinking, and process improvement techniques. Rather than focusing exclusively on technical skills, training initiatives should cultivate employees' ability to generate and implement new service ideas.

Third, managers at all levels should actively signal their support for training and development through visible endorsement of training activities, provision of resources, and recognition of employees' learning achievements. As SET suggests, employees who perceive genuine organisational investment in their development are more likely to reciprocate through enhanced performance and innovation.

Finally, the performance of frontline employees should be regularly assessed through multiple methods, including customer surveys, peer evaluations, and supervisor appraisals, to provide the data needed for evidence-based training decisions.

Limitations and Directions for Future Research

This study has several limitations that should be considered when interpreting its findings. First, the cross-sectional design precludes causal inferences about the relationships between training, service innovation, and performance. Future research should adopt longitudinal designs to establish causal order and examine how training effects evolve over time.

Second, the convenience sampling approach and the restriction of the sample to Greater Accra limit the generalisability of the findings to other regions of Ghana and to other sub-Saharan African contexts. Future studies should use probability sampling



methods and larger, more geographically diverse samples to enhance external validity.

Third, the study's reliance on self-reported data introduces potential common method bias, despite the discriminant validity results suggesting this is not a major concern in the current study. Future research could use multi-source data, incorporating supervisor or customer assessments of employee performance and innovation, to mitigate this limitation.

Fourth, the small magnitude of the indirect effects warrants attention. Future studies should explore whether alternative mediating mechanisms, such as organisational commitment, job satisfaction, or knowledge sharing, may provide stronger explanatory power in the training-performance relationship. The inclusion of additional boundary conditions, such as leadership style, organisational culture, or employee readiness for change, could also enrich theoretical understanding.

Finally, future research could adopt qualitative or mixed-methods approaches to provide deeper insights into the mechanisms through which training shapes service innovation and performance in the Ghanaian hospitality context.

Disclosure Statement

No potential conflict of interest was reported by the authors.

Funding

No funding was received for this study.

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ANALYSING DESTINATION IMAGE UNDER HEALTH RISKS IN THE POST-COVID-19 ERA IN UGANDA

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Abstract

After COVID-19, health risks have increasingly influenced tourists' perceptions of destinations, yet research on risks remains limited in emerging tourism markets. This study, mainly guided by the Risk Perception Theory, Protection Motivation Theory and the Cognitive-Affection framework, examined how health risks (disease, food safety, and road accidents) influence destination image in Uganda. A quantitative approach employing PLS-SEM was used to analyse data from 384 international tourists collected via a self-administered questionnaire. The results indicated that only disease risk had a statistically significant influence on destination image, though the effect size was small and the predictive power limited. This suggests that in Uganda, destination perceptions may be influenced more by factors such as tourist attractions and tour experiences than by health risks, thereby contributing to the literature on post-pandemic travel normalisation. Therefore, destination marketing should focus on promoting Uganda's unique attractions, while also prioritising the management of perceived health risks.

Keywords: Destination Image, Disease Risk, Food Risk, Road Accident Risk, Uganda

INTRODUCTION

Tourism is a vital sector for many countries, as visitors significantly contribute to a nation's economic growth and quality of life. The number and origin of tourists arriving at a destination often reflect the attractiveness, image, popularity and competitiveness of a nation's tourism sector. Consequently, building and maintaining a destination image has become a strategic goal for policymakers and tourism service providers in most destinations. A good destination image is necessary to inspire and attract more tourists, which is crucial for generating tourism revenue (Crames et al., 2023). Furthermore, a destination's positive image enhances its reputation among tourists through positive word-of-mouth promotion on platforms such as social media, thereby lowering marketing and advertising costs (Abbasi et al., 2024). Moreover, a good image is not only a precursor to attracting tourists to a destination, but it also leads to loyal tourists who may spend more and encourage others to explore the destination.

Additionally, a positive image fosters trust among visitors, thereby increasing their likelihood of recommending the destination to friends, family, and colleagues, encouraging others in their social circles to visit and experience trusted destinations themselves (Crames et al., 2023). It is easy and common for tourists to share exciting, positive post-visit experiences of destinations with strong images, rather than negative ones. By doing this, they serve as destination ambassadors, further promoting the destination with a positive image. According to González-Reverté et al. (2025), the loyalty of tourists towards destinations they cherish can be assessed through positive recommendations and emotional connections to these destinations. Therefore, a positive destination image can yield long-term economic benefits, including job creation, which are crucial for resilience and growth in the highly competitive global tourism landscape (Osman et al., 2025; Liu et al., 2025).

In the post-COVID-19 era, there has been increased awareness of health risks as potential threats

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Doi: 10.47963/ajhtm.v5i2.2245.



to tourists' well-being while travelling (Crames et al., 2023). Due to this increased awareness, destinations perceived as high risk may see declines in visitation and loyalty. Even when travel occurs, these high-risk perceptions can negatively affect the destination's image, creating lasting negative impressions in travellers' minds that may affect tourist loyalty intentions (Naeem et al., 2023). Therefore, perceived health risk can affect the overall destination image, which can manifest as cognitive (perceptions of attractions) and affective (emotional and feelings) responses to destination anxiety (Abbasi et al., 2024). This means that a positive destination image can lessen the adverse effects of perceived risks by fostering favourable evaluations and emotional connections. Conversely, a negative image intensified by health concerns of fear, worry, and anxiety can diminish destination trust and lower revisit and advocacy intentions. Therefore, destination image is crucial in translating health risk perceptions into loyalty behaviours. In tourism, especially in Africa, where the disease burden is high, and health systems are sometimes inadequate, perceived health risks are often more pronounced among tourists because tourism services are intangible and affected greatly by tour experience, and therefore, tourists tend to rely heavily on subjective assessments of perceived risks, safety and security when forming impressions of destinations.

Uganda is well-known for its green natural beauty, diverse wildlife, and rich cultural heritage. Home to Mt Rwenzori and Lake Victoria, it features tropical rainforests and the Nile River. Key attractions include gorilla trekking, birding, game drives, and various adventure activities, making it a top tourist destination in East Africa. Before the COVID-19 pandemic, Uganda's tourism sector was thriving,

attracting over 1.5 million international tourists in 2019, making it a key source of foreign exchange (Ministry of Tourism, Wildlife and Antiquities, 2020). However, the pandemic severely impacted tourism, with arrivals dropping to approximately 473,085 in 2020, a decline of around 69.3% due to travellers' fear, global travel restrictions, and lockdowns (Nabukeera, 2022). Following the reopening, Uganda's tourism recovered significantly, welcoming 1,371,895 tourists in 2024, a 7.7% increase from 2023 and about 89.2% of pre-pandemic levels (Uganda Bureau of Standards [UBOS], 2025). Nonetheless, Uganda still trails behind its regional counterparts, with Kenya receiving over 2.39 million tourists and Tanzania around 2.14 million in 2024 (Tourism Research Institute, 2025).

With regard to risks, tourists visiting Uganda may be exposed to health risks such as malaria and sometimes Ebola virus disease (Agaba et al., 2024; Fowler et al., 2024; Izudi et al., 2023), risks related to food safety due to poor hygiene and contamination of foods (Koumassa et al., 2025), and increased risks of road accidents (Atalay et al., 2025). Apart from the mentioned health-related risks, tourists in Uganda are likely to experience additional problems, including conflicts between humans and animals, environmental threats such as excessive rainfall and flooding, and insecurity, especially in those protected areas that border the eastern part of the Democratic Republic of Congo (DRC), and petty crimes (Muresherwa et al., 2022; Weeden & Pamment, 2024). Previous research conducted in Uganda has addressed tourism development, wildlife tourism, transport infrastructure, safety, public health, and tourists' experiences (see, e.g., Muresherwa et al., 2022; Nannono et al., 2023). Nevertheless, to date, no research has addressed tourists' views on health risks, i.e., disease, food safety, and road accidents, and their implications for the



formation of tourists' images of destinations. Thus, there seems to be an empirical gap in Ugandan tourism studies. On the other hand, a theoretical gap also exists, as most Ugandan studies on tourism have focused mainly on tourism-related problems, namely, tourism development and management approaches. Again, integrated tourism risk theories, such as Risk Perception Theory (RPT), Protection Motivation Theory (PMT), and Cognitive Appraisal Theory (CAT), have not been applied extensively in Ugandan tourism research yet. This study, therefore, attempts to fill the identified empirical and theoretical gaps by examining the effect of perceived health risk on destination image in Uganda.

LITERATURE REVIEW

Theoretical Review

The theories used in this study were the Cognitive Appraisal Theory (CAT), the Protection Motivation Theory (PMT) (Rogers, 1983) and Risk Perception Theory (RPT). According to CAT, individuals cognitively appraise environmental stimuli, leading to emotional reactions that inform their attitudes and perceptions. In tourism, cognitive evaluation involves assessing destination attributes and associated risks, thereby creating destination images (Baloglu & McCleary, 1999). For instance, tourists visiting Uganda may cognitively evaluate potential health risks associated with disease outbreaks, food safety issues, and road safety concerns. Additionally, PMT emphasises the need to understand two appraisal mechanisms: threat appraisal, in which the level of risk and vulnerability is assessed, and coping appraisal, which evaluates the efficacy of protection measures. Although PMT is concerned with coping appraisal, the current study focused on threat appraisal, as it helps assess tourists' risk perceptions.

Finally, RPT is also important, as it indicates that risk perceptions are subjective evaluations shaped by experiences, information, social factors, and other contextual elements (Slovic et al., 1982). This means that different tourists may have diverse risk perceptions of the same health-related condition. In summary, CAT helps in understanding the process of transforming risk-related information to destination evaluations, whereas PMT is helpful when dealing with threat appraisals related to health risks. On the other hand, RPT helps in explaining the subjectivity involved in risk evaluation. In addition, CAT shows how risk information influences tourists' perceptions through cognitive appraisal and emotional responses. Hence, the description above provides insight into how destination images are created. In Uganda, tourists are likely to form negative destination images due to several disease outbreaks, such as Ebola and malaria (Seabra et al., 2024; Zhang et al., 2025).

Perceived Health Risk

Perceived health risk is the tourists' subjective evaluation of potential health threats encountered during travel (Chua et al., 2021). Situated within Perceived Risk Theory, it represents one dimension of broader travel risks, alongside safety, financial, psychological, and environmental concerns (Karl et al., 2022; Neuburger & Egger, 2023). Contemporary scholarship increasingly recognises perceived health risk as multidimensional rather than singular. First, disease-related risk remains central, especially for infectious diseases likely to be transmitted during travel. In most cases, tourists often evaluate their exposure to infectious diseases, such as yellow fever, malaria, and emerging epidemics like monkeypox, particularly in destinations with perceived weak health systems (Williams et al., 2022;



Yu et al., 2023). In the African context, where the disease burden is high, this raises health risks, thereby affecting the destination image of African destinations (Novelli et al., 2023). For instance, malaria risk in Uganda continues to influence travel decisions; therefore, some tourists take preventive measures such as prophylactic medications before travel and sleeping under mosquito nets during their trips (WHO, 2023). Second, food and water safety risks arising from contamination, poor hygiene, and sanitation lead to illness, which affects travellers' perceptions of the destination (Williams et al., 2022). Third, road accident risk concerns transport safety resulting from poor road conditions, driver behaviour, and poor road safety enforcement. This particular risk is prominent in developing destinations where traffic safety systems may be less reliable. Beyond these, health-related risks in developing destinations are exacerbated by inadequate medical facilities and limited emergency response capabilities (Yu et al., 2023). The current debates around health risks, especially in the post-COVID-19 era, emphasise the need to implement awareness-raising strategies alongside adaptive risk strategies (Zheng et al., 2022).

Further, the Social Amplification of Risk Framework (SARF) introduced by Kaspersen et al. (2022) indicates that the formation of risk perceptions is not solely based on risk exposure; rather, it may be enhanced or diminished by risk communication through different media outlets, social contacts, government recommendations and advisories. This means that the use of media in tourism can amplify tourists' perceptions of risk when the media reports on epidemics, food poisoning, and road accidents; in such circumstances, tourists' risk perceptions may exceed the actual risk involved. Therefore, media-based risk communication is extremely important in shaping

perceptions of health risk factors. Hence, researchers have also questioned whether risk perception is based on objective reality or is socially constructed through media and destination image constructs, indicating a complex interrelationship between health risks and tourists' behaviour.

Destination Image

The concept of destination image is increasingly recognised in the academic literature as a complex and multifaceted construct that reflects tourists' beliefs, impressions, and emotional connections to a particular location (Stylidis et al., 2020). It represents the overall reputation and mental perception that tourists have about a destination (Ceylan, Cizel & Karakaş, 2021). This perception is based on the destination's attractions, such as beautiful scenery, wildlife, infrastructure and recreational facilities. In addition, it can be based on service quality standards, the cultural and friendliness of people, safety and security considerations, and environmental factors. Relatedly, it can also be based on tourists' perceptions formed from personal experiences for those who have ever travelled to the destination, media information, promotional messages, word-of-mouth, and online reviews. In this regard, when tourists' expectations about a destination are met, they may perceive they are getting good value for money, which improves the destination's image. Conversely, if a destination has a negative image, tourists may perceive it as not offering value for their money, further eroding its image. To understand destination image, Lazarus's (1991) cognitive-affective evaluation theory can explain the cognitive and affective responses and their connection to consumer behaviour and tourism marketing. In the field of tourism marketing, this theoretical framework aligns with the well-established model of destination image,



illustrating that cognitive image (evaluations based on beliefs and knowledge about attributes) leads to affective image (emotional responses and feelings) and ultimately results in behavioural image or conative intentions (Baloglu & McCleary, 1999; Styliadis et al., 2020).

Studies on the concept of destination image have traditionally discussed three interrelated aspects: cognitive, affective, and conative (Baloglu & McCleary, 1999). In the current study, only two of those aspects, namely, cognitive and affective, have been focused upon. The main point is to examine the process of formation of destination image, while there are certain risks to tourists' health. Therefore, it was assumed that the conative aspect, which refers to actions undertaken by tourists (e.g., the intention to visit the destination again), is a consequence rather than an aspect of destination image (Styliadis et al., 2020).

Perceived Health Risks and Destination Image

Recent studies indicate that perceptions of health risks, particularly those associated with infectious diseases, food safety, and road accidents, negatively affect elements of destination image (Zhang et al., 2025; Wang et al., 2024). Furthermore, health risks can affect destination image, instilling fear and uncertainty, thereby diminishing the appeal of the destination and its attractions (Williams et al., 2022; Wang et al., 2024). These studies are supported by the Perceived Risk Theory (Bauer, 1960), which suggests that tourists' behaviours and attitudes after visiting a destination are profoundly influenced by the types of perceived risks encountered there. (Najar & Rather, 2022). Risks related to disease, such as outbreaks of infectious illnesses, increase feelings of uncertainty and fear, which in turn diminish emotional

assessments and the destination's attractiveness. Likewise, concerns about food safety, especially in informal dining settings such as roadside restaurants and highway eating facilities, can undermine tourists' confidence in local sanitation practices and diminish trust in the systems in place (Nouri et al., 2018; Liu et al., 2025). Additionally, risks associated with road accidents, often stemming from inadequate infrastructure, poor driving behaviours, and ineffective enforcement of traffic regulations, further undermine perceptions of safety and elicit negative emotional responses (Abdullah et al., 2023). Therefore, perceived health risks among tourists regarding disease outbreaks, safety, hygiene practices, the quality of health facilities, and the clarity of risk information are strong factors influencing travellers' perceptions of a destination.

Nevertheless, the relationship between health risk perception and destination image remains a subject of divergent scholarly views in the tourism literature. Studies have shown that health risks can tarnish the image of destinations by creating fear, anxiety, and concerns about tourist safety (Wang et al., 2024; Zhang et al., 2025). On the other hand, other studies show that the influence of health risk perception exerted on destination image is usually insignificant, indirect, and highly contextual, like in the case of the COVID-19 pandemic, where some tourists exhibited resilience. This can also occur when the destination offers appealing features, a good reputation, effective communication about risk management, and a history of safety (Pathak & Chintalapati, 2022; Rasoolimanesh et al., 2023). As such, it can be inferred that the relationship between health risk perceptions and destination images may be influenced by specific contexts. There is therefore a



need for more research on the subject matter, especially in emerging destinations such as Uganda.

Considering these opinions, it implies that tourists may perceive destinations that implement effective health risk interventions, such as promoting health awareness and safety measures, as having a good image (Abdullah et al., 2023). In addition, available research suggests that effective safety management, characterised by strong health prevention and management strategies, and clear communication and information sharing, can lessen these negative effects and improve both cognitive and emotional assessments of a destination (Naeem et al., 2023). In developing destinations like Uganda, increased perceptions of risks related to disease prevalence, food hygiene, and road safety can hinder

the formation of a positive destination image, eventually affecting tourism competitiveness and post-tour advocacy efforts. Therefore, there is a link between tourists' perceptions of a destination's health risks and the formation of the destination image in their minds.

Based on Torraco's (2016) integrative review methodology, as indicated in Table 1, the construct of perceived health risk is multidimensional and grounded in various theories of risk perception, whereas the construct of destination image draws on cognitive and affective evaluations. Consequently, these different viewpoints indicate that perceived health risk influences destination image, thus explaining the hypothesis of this study.

Table 1: Conceptual Synthesis

Study Variable	Key Dimensions	Theoretical Underpinning	Core Theoretical Proposition	Key Literature	Expected Relationship
Destination Image	Cognitive Image; Affective Image	Cognitive Appraisal Theory (Lazarus, 1991); Destination Image Model (Baloglu & McCleary, 1999)	Tourists form cognitive evaluations of destination attributes, which subsequently generate affective responses that shape destination images.	Stylidis et al. (2020); Ceylan et al. (2021); Stylidis et al. (2020)	Destination image is expected to be influenced by tourists' perceptions of health-related risks.
Perceived Health Risk	Disease Risk, Food Safety Risk, Road Accident Risk	Perceived Risk Theory (Bauer, 1960); Protection Motivation Theory (PMT) (Rogers, 1983); Social Amplification of Risk Framework (SARF) (Kasperson et al., 2022)	Tourists evaluate potential threats associated with travel. Perceived severity and vulnerability to health-related risks influence attitudes and responses. Media and channels can amplify or attenuate perceived risks.	Chua et al. (2021); Karl et al. (2022); Williams et al., 2022); Yu et al. (2023); Wang et al. (2024)	Higher perceived health risks are expected to negatively influence destination image.
Perceived Health Risk → Destination Image	Relationship between risk perceptions (disease, food safety, road accident) & destination evaluations (cognitive &	Integrated Perceived Risk Theory (Bauer, 1960); Cognitive Appraisal–Risk Perspective (Lazarus, 1991; Rogers, 1983; Slovic et al., 1982)	Perceived health risks trigger cognitive and emotional responses that influence destination image. But the strength of this relationship may vary depending on the destination context and	Wang et al. (2024); Zhang et al. (2025); Pathak & Chintalapati (2022); Rasoolimanesh et al. (2023)	Perceived health risks are expected to trigger cognitive and emotional responses that can natively influence



	affective image)		the effectiveness of communications.		destination image.
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Source: Developed by the Authors based on Torraco's (2016) Integrative Review Methodology

Guided by the theoretical integration, the study advances the following hypotheses:

- H1: Perceived disease risk significantly influences destination image.
- H2: Perceived food safety risk significantly influences destination image.
- H3: Perceived road accident risk significantly influences destination image.

Figure 1 shows the conceptual model for the relationship between perceived health risk dimensions and destination image.

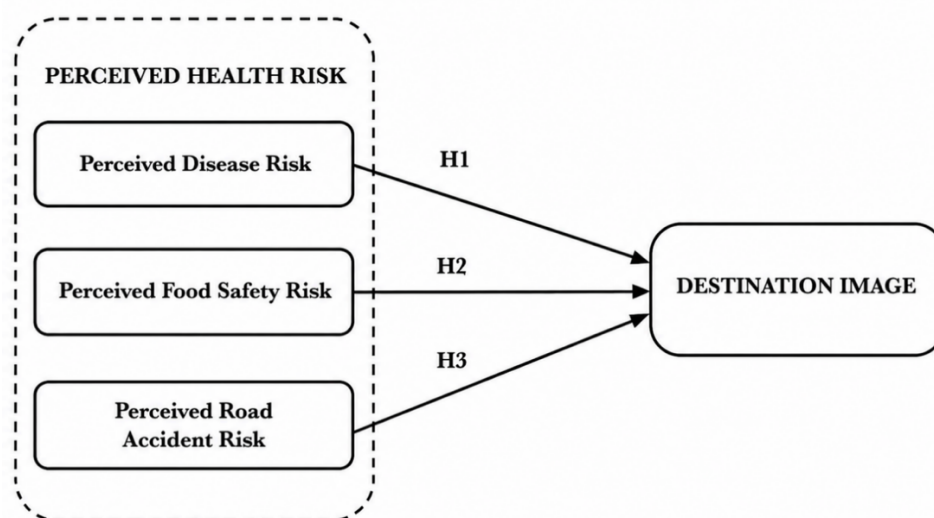


Figure 1: Conceptual Model for the Study

Source: Adopted from Perceived Risk Theory (Bauer, 1960)

METHODOLOGY

Research Design

This study employed a cross-sectional research design and quantitative approach, using a correlational research design to identify relationships among the study variables (Taherdoost, 2022). The correlational framework showed both the strength and direction of relationships, thus enabling the assessment of the study variables, i.e., perceived health risk and destination image (Bloomfield & Fisher, 2019). Although the study hypothesises relationships among the constructs, the cross-sectional design captures data at a single point in time, which is

acknowledged as a study limitation here. However, it permits the examination of associations and predictive relationships rather than conclusive causal effects.

Population and Sample

The study population was 1,274,210 international tourists who had visited Uganda in 2023 (MTWA, 2024). The sample size was 384 according to Krejcie and Morgan (1970). Studies involving mobile populations, such as tourists, often use previous tourist arrival figures as the population for sample size calculations because these figures generally provide a reasonable estimate of the total number of potential respondents. Therefore, a convenience sampling



method that employed an intercept random sampling approach was used to select respondents.

However, the researchers noted that the intercept random sampling technique could introduce sampling biases. Therefore, to minimise such biases, data collection took place every day and at every time international flights took off, and all tourists interested in participating in the study had an equal chance. Additionally, this research did not consider tourists using entry and exit points other than Entebbe International Airport, as it focused on long-haul international tourists, who contribute the most foreign exchange revenue and who, for the most part, pass through the airport. However, this research approach was recognised as a limitation, meaning that the results can only be generalised to international tourists departing from Entebbe International Airport, Uganda's main gateway.

Data Collection

Data was collected between November 2024 and January 2025. A self-administered questionnaire was employed to collect data from international tourists. The questionnaire covers background characteristics in section A, which include both tourist and trip profiles. Section B included items measuring the variables of perceived health risks and destination image. The indicators for the independent variable, perceived health risk (disease, food safety, and road accidents), were obtained from Najjar & Rather (2022), Chen et al. (2023), and An et al. (2024). The items for destination image (cognitive and affective) were obtained from Zhou, Ng, & Deng (2024) and Najjar & Rather (2022). The measurement items were anchored on a 6-point Likert scale ranging from '1' – strongly disagree to '6' – strongly agree. A 6-point Likert scale was adopted to eliminate the neutral response option and reduce response bias by encouraging a clear,

unbiased evaluative position, thus improving discriminative power in attitude measurement (Chomeya, 2010).

Data Analysis

Partial Least Squares Structural Equation Modelling (PLS-SEM) was performed using SmartPLS4. The measurement model was evaluated for validity through the Average Variance Extracted (AVE) and Heterotrait Monotrait (HTMT) ratio of correlations, and for reliability using Cronbach's alpha (α) and Composite Reliability (CR). Multicollinearity was assessed using the Variance Inflation Factor (VIF). Furthermore, a structural model and corresponding path coefficients were developed to test the causal relationships among the variables. The measurement model focused on evaluating the validity and reliability of the constructs, while the structural model and path coefficients were used to assess the hypothesised relationships among them.

Ethical Considerations

The research process was conducted in accordance with ethical considerations, including obtaining informed consent from respondents, maintaining confidentiality, and minimising risks. Prior to completing the questionnaires at Entebbe International Airport, tourists were informed of the study's objectives and that their participation was voluntary. Additionally, throughout the data collection process, no information about the participants' identities or answers was disclosed. Moreover, confidentiality was assured by presenting the findings in a summarised form to avoid linking the results to any individual participant in the study. Likewise, the envisaged risks were mitigated by respecting the rights of the study participants and by following the guidance provided by the airport management.



RESULTS

Demographic Characteristics and Trip Profile of Respondents

The demographic and trip profile characteristics of respondents are presented in Tables 2 and 3.

Table 2: Demographic Profiles of International Tourists (N=384)

Demographic Profile	Items	Percent
Gender	Male	52.1
	Female	47.9
Age	18–29	26.0
	30–39	28.1
	40–49	21.9
	50–59	14.1
	60 & above	9.9
Marital Status	Married	46.1
	Single	46.1
Education Level	Postgraduate	20.1
	Bachelor's	38.0
	Diploma	26.0
	High School	12.0
	Below High School	3.9
Income Level	USD 50,000 & below	24.0
	USD 50,001–100,000	24.0
	USD 100,001–150,000	18.0
	USD 150,001–200,000	14.1
	Above USD 200,001	20.1
Employment Status	Employed	78.1
	Retired	12.0
	Not yet employed	9.9

Source: Survey

Table 2 results show that by gender, 52.1% were male and 47.9% were female. The age distribution shows that the majority were young to middle-aged adults, with 26.0% aged 18-29 years, and 28.1% aged 30-39 years, implying that more young people may have travelled to Uganda at the time of the study. Regarding respondents' education levels, 20.1% had postgraduate qualifications, while 38.0% had

bachelor's degrees, suggesting that the majority were literate and capable of providing informed responses. The respondents' annual incomes were relatively varied, with the majority earning less than USD100,000, which was in line with the average annual incomes of international travellers. Finally, the majority of respondents were employed (78.1%), while 12.0% had retired, and 9.9% were not yet employed. Generally, the demographic profiles were varied, indicating that the responses came from diverse groups and thus could be relied on to represent a broad range of responses for the study.

Table 3: Trip Characteristics of International Tourists (N=384)

Tourism Trip Profiles	Items	Percent
No. of Times Visiting Uganda	First time visit	26.0
	Two times	18.0
	Three times	19.0
	Four times	11.0
	More than four times	26.0
Days Stayed in Uganda	1–2 days	13.0
	3–4 days	11.0
	5–6 days	19.0
	6–7 days	19.0
	More than 7 days	38.0
Purpose of Visiting	Leisure Holiday	36.0
	Business	28.0
	Attend Meeting	10.0
	Visit Friends / Relatives	14.0
	Others	12.0
Visiting With	Alone	28.0
	Family	28.0
	Friends	16.0
	Workmates	28.0
	Others	12.0
How They Heard About Uganda	Travel Agents	12.0
	Internet	24.0
	Friends / Relatives	30.0
	Newspapers	34.0



Continent of Origin	Africa	16.0
	America	20.0
	Asia	14.0
	Australia	10.0
	Europe	40.0

Source: Survey

According to Table 3, the purposes of the visit were: leisure (36%), business (28%), attending meetings (10%), visiting friends or relatives (14%), and other purposes (12%). Regarding travel companions, 28% of tourists travelled alone, 28% travelled with family members, 16% travelled with friends, and 28% with workmates. On how they learned about Uganda, 12% were through travel agents, 24% via the internet, 30% through friends and relatives, and 34% from newspapers. Regarding the continent of origin, 16% were from Africa, 20% from America, 14% from Asia, 10% from Australia, and 40% from Europe. Based on these results, it can be concluded that the tourists who participated in the study had varied trip profiles, i.e., broad backgrounds, travel objectives, knowledge and experiences.

Common Method Bias

Since data were gathered through a self-administered questionnaire from a single source, it was necessary to analyse common method bias (CMB), which was assessed using Harman's single-factor test, as advised by Podsakoff et al. (2012). The results showed that the first factor accounted for 36.89% of the total variance, which was below the recommended threshold of 50%. This implied that the study had no serious concerns about common method bias. In addition, certain procedural measures were adopted during the preparation and completion of the questionnaire. These measures included ensuring respondents' anonymity and confidentiality, grouping constructs into separate sections of the questionnaire, and using primarily neutral, nonleading wording to prevent socially desirable responses.

Measurement Models

To assess the appropriateness of the data for structural equation modelling, Smart Partial Least Squares (SmartPLS) version 4.9.1.1 was used (Hair et al., 2022). The following tests were conducted: convergent and discriminant validity were established

Table 4: Average Variance Extracted (AVE) and Heterotrait-Monotrait (HTMT) Ratios

Measures	AVE	PHR	RR	DR	FR
PHR					
RR	0.708	0.524			
DR	0.559	0.608	0.550		
FR	0.650	0.896	0.852	0.876	
Measures	AVE	DI	AI	CI	
DI					
AI	0.715	0.286			
CI	0.755	0.787	0.840		

Key: RR = Road Accident Risk; AI = Affective Image; CI = Cognitive Image; DI = Destination Image; DR = Disease Risk; FR = Food Safety Risk; PHR = Perceived Health Risk

Source: Survey



using AVE and HTMT indices, while internal consistency was confirmed using Cronbach's alpha (α) and composite reliability. Furthermore, variance inflation factor (VIF) values were examined to assess multicollinearity, demonstrating that the independent variables were sufficiently distinct and suitable for predicting the dependent variable. The results are presented in Tables 4 and 5.

The results in Table 4 show that all AVEs were above 0.5, the minimum requirement for convergent validity, indicating that the constructs attained convergent validity. The Heterotrait-Monotrait (HTMT) Ratio Correlations were all below the maximum of 0.9 (Hair et al., 2022), indicating that the constructs demonstrated discriminant validity. Based on these results, it can be concluded that the constructs measuring perceived health risk and destination image were both convergent and discriminant, thus independent of each other. This means their measurement indicators were valid.

Table 5: Reliability Coefficients and VIF

Construct	Cronbach's α	(CR)	VIF
RR	0.897	0.924	1.404
DR	0.797	0.861	1.484
FR	0.861	0.902	1.550
CI	0.918	0.939	1.072
AI	0.900	0.926	1.072

Key: RR = Road Accident Risk; AI = Affective Image; CI = Cognitive Image; DR = Disease Risk; FR = Food Safety Risk

Source: Survey

The results show that the constructs met the required measurement criteria for Composite Reliability (CR), with values ranging from 0.861 to 0.926, indicating satisfactory internal consistency, as per Hair et al. (2022). Nonetheless, composite reliability is a better choice as a measurement criterion than Cronbach's alpha, as it does not require equal loadings across indicators (Hair et al., 2022; Marcoulides & Raykov, 2019). On the other hand, all of the Cronbach's alphas in this research had values ranging between 0.797 and 0.918, surpassing the conventional threshold of 0.70, indicating satisfactory reliability. Also, the range of Variance Inflation Factor (VIF) values was between 1.072 and 1.550, well below the critical value of 5.0, indicating that the constructs were distinct and that multicollinearity was absent among the predictors (Marcoulides & Raykov, 2019). Overall, these findings provided considerable support for the suitability of the measurement model used herein.

Perceived Health Risk and Destination Image

To assess the influence of perceived health risk and destination image, a structural model was developed. The model tested three hypotheses: disease risk (H1), food safety risk (H2), and road accident risk (H3) to examine if they have a significant influence on destination image. The structural model (Figure 2) shows the causal linkages between the variables.

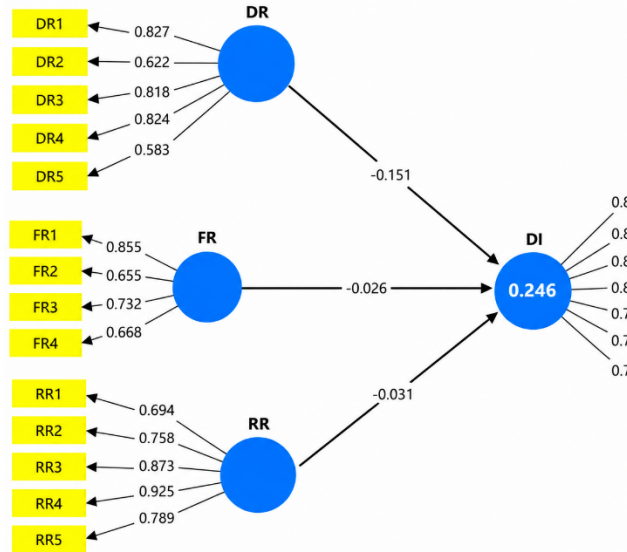


Figure 2: Perceived Health Risk and Destination Image Structural Equation Model

Key: RR = Road Accident Risk; AI = Affective Image; CI = Cognitive Image; DI = Destination Image; DR = Disease Risk; FR = Food Safety Risk

Figure 2 depicts the paths from the three Perceived Health Risk sub-dimensions of Disease Risk (DR), Food Safety Risk (FR), and Road Accident Risk (RR) to Destination Image (DI). Destination image is operationalised into two sub-constructs: Cognitive Image (CI) and Affective Image (AI).

The results in Table 6 showed that all three paths were negatively related; however, only one path of disease risk and destination image was significant ($\beta = -0.151$, $t = 2.293$, $p = 0.022$), as ($p < 0.05$), thus supporting H1, which indicated that the disease risk dimension negatively influenced the destination image in Uganda.

Table 6: Path Estimates for Perceived Health Risk and Destination Image

Path Relationship	β	t	p	F ²
Disease Risk → Destination Image	-0.151	2.293	0.022	0.013
Food Safety Risk → Destination Image	-0.026	0.383	0.701	0.000
Road Accident Risk → Destination Image	-0.031	0.363	0.717	0.001

Table 7: Predictive Summary for Destination Image

R-square	Adjusted R-square	Q ² predict	RMSE	MAE
0.246	0.240	0.013	1.003	0.771

On the other hand, the two paths H2 and H3, i.e., food risk and destination image ($\beta = -0.026$, $t = 0.383$, $p = 0.701$) and road accident risk and destination image ($\beta = -0.031$, $t = 0.363$, $p = 0.717$), were not supported as they produced non-significant results ($p > 0.05$). This suggested that even when the directions of the relationships were negative, the two individual health risk dimensions of food safety and road accidents did not directly affect the destination image in the Ugandan tourism context. The model accounted for

only 24.6% of the variance in destination image ($R^2 = 0.246$; Adjusted $R^2 = 0.240$), indicating a weak explanatory power (Hair et al., 2022), although it approaches the moderate threshold of 0.25. This suggests that perceived health risk, when examined across the individual dimensions studied, is a limited direct predictor of destination image formation in the Ugandan context. These findings may suggest that destination image is shaped by a broader array of cognitive and affective stimuli beyond health risk



perceptions alone, including natural attractions, service quality, and cultural experiences, as theorised in the destination image literature (Stylidis et al., 2020; Rather, 2023).

The effect sizes (f^2) for the relationships between different aspects of Perceived Health Risks and Destination Image were examined. The findings in Table 7 showed almost no effects, as indicated by the following results: Disease Risk (0.013), Food Safety Risk (0.000), and Road Accident Risk (0.001). All health risk dimensions had values below the threshold of 0.020, indicating they did not have a meaningful influence according to Cohen (1988); by comparison, the Disease Risk had the strongest contribution but remained very weak overall. Furthermore, using the blindfolding approach, the model revealed a weak predictive relevance since its Q^2_{predict} was equal to 0.013, which is only slightly higher than the threshold ($Q^2 > 0$) defined by Hair et al. (2022).

DISCUSSION

The findings revealed a more nuanced relationship between perceived health risk dimensions and destination image than originally hypothesised. All three health risks had negative path coefficients, but only disease risk had a statistically significant influence on destination image. Food safety risk and road accident risk were found to have no statistically significant influence on destination image. The above observations partially support theories such as Risk Perception Theory (Bauer, 1960), Cognitive Appraisal Theory (Lazarus, 1991), and Protection Motivation Theory (Rogers, 1983). This suggests that perceived health threats prompt cognitive and emotional assessments that shape destination perceptions. In particular, disease risks are sufficiently salient to affect tourists' perceptions of destinations, whereas food safety and road accident risks do not play a vital

role in shaping Uganda's destination image. The effect size fell below Cohen's (1988) recommended threshold, while the model demonstrated both weak explanatory power for the variance in destination image and weak predictive relevance. Additionally, it is noted that the statistical model had limited explanatory power regarding destination image variability and limited predictive relevance. Therefore, the results indicate that the role of perceived health risks in destination image formation within the analysed dimensions is marginal. In line with contemporary debates regarding null hypothesis testing in tourism studies (De Los Reyes & Dael, 2023), it is also necessary to emphasise that, in addition to significance, one should pay attention to practical significance. In other words, although disease risk was statistically significant, its substantive impact on destination image was minimal, indicating that other destination attributes may exert a stronger influence on tourists' perceptions.

As far as disease risk is concerned, the results revealed a statistically significant negative effect on destination image. This result supported previous studies, which showed that perceptions of disease can negatively affect tourists' destination image due to uncertainty and vulnerability (Zhang et al., 2025; Wang et al., 2024). The explanation of such a phenomenon can be presented using Cognitive Appraisal Theory (Lazarus, 1991), according to which people cognitively assess the likelihood and consequences of contracting an illness and form an evaluation that affects the image of the destination. Furthermore, according to Risk Perception Theory (Bauer, 1960), diseases are perceived as an immediate and personal threat to tourists compared with other threats that can arise when travelling to a destination. However, the effect size remained insignificant; thus,



although disease risk has a statistical effect, it has little practical impact on the destination's image. Therefore, disease risk is not likely to change tourists' evaluation of the destination, Uganda. Rather, destination image appears to be shaped by a broader combination of cognitive evaluations and affective responses associated with destination attractiveness, tourism experiences, and destination reputation (Baloglu & McCleary, 1999; Rather, 2023).

Regarding food safety risk, the results show a non-significant negative correlation with destination image. Therefore, although tourists view food safety issues as travel risks, this perception does not significantly influence their view of Uganda as a travel destination. The result differs from previous studies, which suggest that food safety risk concerns have a significant impact on destination image (Wang et al., 2024; Williams et al., 2022). From a theoretical perspective, this could be explained by Cognitive Appraisal Theory, which suggests that tourists evaluate various destination attributes simultaneously. In the case of Uganda, positive cognitive and affective evaluations of wildlife tourism, natural features (for instance, mountain gorillas), and culture seem to override concerns about food safety when evaluating the destination image. Furthermore, the negligible effect size suggests that food safety risk contributes very little practical explanatory value to destination image formation in this context.

Likewise, road accident risk exhibited a statistically insignificant negative association with destination image. While transportation safety has traditionally been considered an essential part of tourism risk, according to Atalay et al. (2025), the current study results showed that road accidents were not a significant factor in shaping tourists' perceptions of Uganda. This means that tourists may separate

transportation risks from the overall evaluation of the destination. As suggested by the Risk Perception Theory (Bauer, 1960), not all perceived risks are equally important in destination evaluation. There are, therefore, certain risks that are more prominent than others, especially those related to personal health, such as infectious diseases. In addition, the very small effect size indicates that road accident risk had practically no influence on destination image. Consequently, destination image appears to be influenced more strongly by other cognitive and affective evaluations than by perceptions of road safety alone.

Collectively, these findings contribute to the growing literature on post-pandemic travel normalisation. The present findings provide evidence that, while disease-related risks remain relevant, health risks generally exert only a weak influence on destination image formation in the context of Uganda. This suggests that health-risk perceptions may have become only one of many competing considerations in destination evaluation. Consequently, the findings support emerging arguments that destination image in the post-COVID-19 era is increasingly shaped by a mixture of cognitive evaluations and affective experiences rather than health-risk perceptions alone. Recent tourism research suggests that tourists increasingly assess destinations using broader experiential and destination-quality considerations rather than focusing exclusively on risk-related concerns (Rather, 2023). Furthermore, according to Rasoolimanesh et al. (2023), travellers' trust and destination experiences coupled with their overall destination evaluations have become increasingly important in shaping tourists' behaviours in the post-COVID-19 travel environment. These null findings contribute to the emerging body of literature suggesting that the influence of perceived risks on



tourism outcomes may have weakened in the post-COVID-19 era. In any case, as international travel gradually normalised, tourists became apparently more tolerant of certain health and safety risks, judging destinations using not only risk perception but also a broader range of cognitive and emotional dimensions (Pathak & Chintalapati, 2022; Rasoolimanesh et al., 2023). This could be why both food safety and road accident risks had little effect on destination image in the Ugandan setting.

CONCLUSION

This study examined the influence of health-risk perception dimensions (diseases, food safety issues, and road accidents) on Uganda's destination image in the post-COVID-19 period. Results indicated that health-risk dimensions were negatively related to destination image, but only disease risks had a statistically significant impact. Perceived health risk due to food safety and road accidents did not significantly influence destination image. These results partially support theories of risk perception, cognitive appraisal, and protection motivation, which argue that individuals' perceived threats can influence their cognition and emotions toward particular destination sites. Even though health risks due to disease affected destination image, their practical significance was small, given their negligible effect size and the model's weak explanatory and predictive power. Thus, despite their importance, perceived health risks had a marginal influence on the formation of destination image among international tourists in Uganda. Therefore, these results indicate that the perception of destination image is probably more significantly influenced by broader cognitive and emotional evaluations related to destination attractiveness, tourist experiences, natural features,

and destination reputation than by perceptions of health risks alone.

In terms of contributions, the present study adds to the growing body of knowledge on the normalisation of travel after the pandemic by showing that certain perceived health risks, such as those related to food safety and road accidents, may no longer be dominant factors in shaping destination images. In line with the current body of tourism research, it seems that tourists tend to perceive destinations based on other destination quality criteria as well. Consequently, tourists' health-risk perceptions may represent only one of several competing reflections in destination evaluation within the contemporary tourism environment. Theoretically, the current study contributes to the existing body of tourism risk research by demonstrating that the predictive capacity of risk models based on both Protection Motivation Theory and Risk Perception Theory may be lower than expected in the post-pandemic environment. Specifically, the empirical data show that destination image formation was increasingly related to general cognitive and affective assessments of the destination experience, rather than to health risk assessments. Hence, the paradigm of risk aversion that dominates the tourism risk literature needs to be re-examined. In practice, the current findings suggest that destination marketing managers and policy makers need to improve their risk management and communication systems for health risks, especially infections. Yet, the emphasis needs to be on promoting Uganda's unique tourist features, such as natural attractions, wildlife safaris, and cultural heritage, which appear to play a more prominent role in shaping destination image.



RECOMMENDATIONS

The findings indicated that disease risks had a statistically significant influence on destination image, which food safety and road accidents did not, suggesting that destination image may be influenced more strongly by broader destination attributes, including tourism experiences, destination attractiveness, natural attractions, and cultural offerings. Therefore, destination managers and policymakers, especially the Uganda Tourism Board, should continue to prioritise promoting Uganda's tourism assets through marketing communications that highlight the quality of the experience and the destination's unique value proposition. In addition, health risk management should continue to play a complementary role to marketing communication. Tourists will need to receive clear health and safety guidelines from tourism stakeholders such as the airport authority, hotels, transportation providers, tour guides, and tourist site managers, with specific emphasis on disease prevention, information on travellers' health, vaccination requirements, emergency response preparedness, food hygiene standards, and road safety practices, among others. These practices might not directly enhance destination image, but can help create more confident tourists who will have better experiences at the destination. Moreover, tourism authorities should implement effective risk communication practices to inform visitors about health and safety issues. In line with the study's findings, such risk communication should complement destination marketing communication.

Limitations

First, the study used a cross-sectional research design, capturing tourists' perceptions at a single point in time. Perceived health risks and

destination image can change in response to changes in health conditions, disease outbreaks, media reporting, and destination experiences. Thus, further research should use longitudinal designs to assess the temporal dynamics of these relationships. Second, only three aspects of perceived health risks, namely disease risk, food safety risk, and road accident risk, were examined. Although the proposed model helped explain some variance in destination image, its ability to predict and explain destination image can be improved by considering other variables that may play a significant role in shaping it. Thus, future research should consider other predictors, such as service quality, destination experiences, destination trust, social media communication, online reviews, electronic word-of-mouth, destination reputation, and artificial intelligence-based tourism communication.

Third, the study was conducted in the Ugandan tourism context among international tourists using Entebbe International Airport. As a result, the findings may be somewhat limited to the domestic tourists, regional tourists, and tourists visiting other emerging destinations. Comparative studies across different country contexts would enhance understanding of how perceived health risks influence destination image under varying cultural conditions. Fourth, the findings provide an important theoretical contribution, demonstrating that the effect of perceived health risks on destination image can be weaker in post-pandemic and emerging-market environments than predicted by risk-based tourism frameworks. Although Risk Perception Theory, Cognitive Appraisal Theory, and Protection Motivation Theory have received partial support, the limited practical effects indicate that tourists tend to evaluate destinations in terms of broader cognitive and emotional considerations rather than health-risk



perceptions. Thus, further research should explore potential moderators and mediators of the relationship under study, such as destination trust, tourist experience, risk tolerance, destination familiarity, and travel motivation.

Finally, it is necessary to conduct further research about the impact of destination marketing strategies and risk communication campaigns on destination image. In particular, it would be interesting to find out whether combining health and safety messaging with destination branding and experiential marketing affects tourists' perceptions in the post-pandemic tourism environment.

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HEALTH AND SAFETY PRACTICES OF EMPLOYEES IN HOTEL AND RESTAURANT KITCHENS IN ACCRA

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Abstract

This study assessed employees' health and safety practices in selected hotel and restaurant kitchens in Accra, Ghana. A cross-sectional design was used. Data were collected through structured interviews with 320 kitchen staff and unstructured observations of staff practices between June and August 2021. The data were analysed using the chi-square test of independence. The study found that kitchen staff at hotels and restaurants in Accra primarily used personal protective equipment (PPE) to ensure their health and safety. However, the PPEs used were inappropriate, and there were lapses in the execution of staff roles as stipulated in the Occupational Safety and Health Convention (No. 155) and the Ghana Labour Act (Act 651). It was also established that demographic factors such as sex, educational level, and positions held within hotel and restaurant kitchens significantly influenced all health and safety practices undertaken by staff, including updating knowledge and skills, use of PPE, reporting hazards/accidents, and adhering to established instructions/procedures carried out by the staff. It is recommended that the Ghana Tourism Authority (GTA) and the Ghana Fire Service continue to sensitize hotel and restaurant staff and to ensure that managers supervise and enforce adherence to health and safety measures.

Keywords: Employees, Restaurant, Kitchens, Safety and Health, Practices

INTRODUCTION

Health and safety are important in workplaces as they focus on providing and improving a healthy working environment (Srivastava, 2017). The goals of workplace health and safety are to promote workers' well-being and safety, prevent accidents and illnesses, and create a workplace that supports health and safety for all employees (Srivastava, 2017; Taderera, 2012; World Health Organization, 2022). Working in a conducive, hygienic, and safe environment is not only a human need, as indicated in Maslow's Hierarchy of Needs (Maslow, 1943), but also a fundamental human right, as stipulated in most national legislation, including the Constitution of the Republic of Ghana [Section 24:1] (Republic of Ghana, 1992). It is also a global target under the Sustainable Development Goals (SDGs) [Target 8 of Goal 8] (United Nations, 2015) and a tool for achieving industry objectives, including those of the hospitality industry (Rasool, Hussaini, & Saeed, 2020).

The hospitality industry is labour-intensive (Aynalem, Birhanu, & Tesefay, 2016; Baum, 2013;

Cherono, 2011; Tiwari, 2015). The industry encompasses a wide range of businesses, including hotels and restaurants, which form a significant part of the economy of most countries, including Ghana (Kuhn, Benetti, Dos Anjos, & Limberger, 2018; Peters & Kontor-Kwateng, 2016; Srivastava, 2017). Hospitality businesses also strive to meet the increased demands of customers who, through urbanisation and busy lifestyles, consider dining out a necessity to satisfy changes in their dietary habits and patterns (Fraikue, 2016; Horsu & Yeboah, 2015; Tiwari, 2015).

The kitchens of hotels and restaurants play a vital role in providing quality food, a prime factor in the success of hospitality businesses (Dareker & Peshave, 2016). The success of these businesses can be achieved and sustained through the effective performance of healthy kitchen staff (Amran, Ghazali, & Hashim, 2019). It takes an efficient, healthy kitchen staff to provide quality food service that satisfies customers, thereby encouraging repeat patronage and increasing sales (Adiele & Kenneth-Adiele, 2017).

Despite its importance, the kitchen remains one of the most complex areas in hotel and



restaurant environments, where staff are exposed to harsh working conditions and various hazards (Bindu & Reddy, 2016; Malik & Reddy, 2017). These risks stem from the workload and the types of materials handled (Tomita et al., 2013). Poor kitchen design is also a hazardous factor affecting worker safety (Mondal, 2012; Syed Ali et al., 2018). This highlights the need to ensure health and safety in hotel and restaurant kitchens.

Employees are required to report any hazards or dangers they observe in the workplace to supervisors and to use tools and equipment provided by employers properly, as outlined in the Occupational Health and Safety Convention [No. 155] (International Labour Organisation [ILO], 1981) and the Ghana Labour Act [Act 651] (Republic of Ghana, 2003). These measures aim to prevent hazards that could cause injuries and illnesses, improve staff satisfaction, and positively influence performance. However, occupational health and safety remain serious public health issues due to the global prevalence of workplace injuries and deaths, with hotels and restaurants no exception (GSS, 2016; Kini et al., 2025). ILO reports indicate that approximately 374 million injuries and illnesses occur annually in the workplace worldwide, with nearly 2.8 million deaths (International Labour Organization [ILO], 2019a; ILO, 2019b).

In Ghana, individuals in the accommodation and food service industries experience some form of injury annually (GSS, 2016). According to Awang and Yoong (2018), such injuries can affect workers' behaviour and their ability to work efficiently. Kini et al. (2025) have also indicated that injuries in hotels and restaurants have severe implications for a nation's economy. Therefore, addressing occupational health and safety issues in the hotel and restaurant sectors of the hospitality industry is crucial for maintaining the

facilities' positive reputation and safeguarding employee well-being.

However, the existing literature on health and safety issues in Ghana's food service sector primarily focuses on safety risks in local catering environments (Alfers & Abban, 2011), staff knowledge of occupational health and safety in institutional catering (Dzah, 2021), and safety practices in institutional catering (Adanse et al., 2017; Adzinyo et al., 2024). Studies on compliance with health and safety measures as required by the ILO and the Ghana Labour Act have received limited attention in Ghana and in other countries such as Nigeria (Joshua et al., 2017), Kenya (Kaylo, 2016), South Africa (Maseko, 2016), and Sri Lanka (Rajini et al., 2012). Existing studies tend to overlook employees' socio-demographic characteristics in the context of implementing compliance with health and safety measures, even though, according to He et al. (2023), these characteristics are critical to workers' safety, as they affect safety behaviour. The limited understanding of health and safety issues in Ghana's hospitality industry may hinder efforts to improve workplace safety, especially in the kitchen, where hazards are numerous. Therefore, this study aims to examine the relationships between socio-demographic characteristics and the health and safety measures adopted by kitchen staff in hotels and restaurants in Accra, Ghana.

LITERATURE REVIEW

Theoretical Framework

Andersen's Behavioural Model (Andersen, 1968) provides the theoretical foundation for this study. Developed to explain the use of health care services, the model focuses on identifying conditions that promote or hinder utilisation of health care services among individuals (Andersen & Newman, 1973). According to the model, personal



and environmental characteristics, categorised as predisposing, enabling, and need factors, influence health behaviours and the utilization of health services, which in turn affect health outcomes. Predisposing factors include socio-demographic characteristics such as age, sex, and marital status; social structural factors such as education, race, occupation, ethnicity, and religion; and personal beliefs, including values, attitudes, and knowledge about health services (Andersen, 1995; Andersen & Newman, 2005). These factors are believed to be supported by enabling personal, family, and community resources, as well as by perceived and actual needs for accessing health services and by the decision to seek health care.

Even though this theory has been adopted mainly to discuss the utilisation of healthcare services, it could be adopted to explain the behaviour of hotel and restaurant kitchen staff towards health and safety measures in the hospitality industry. This study posits that predispositional factors, being referred to as background characteristics such as age, sex, education, mode of employment, and job positions of staff in hotel and restaurant kitchens, may influence their behaviour regarding health and safety practices mandated by the Ghana Labour Act (Act 651) and ILO.

Health and Safety Practices of Hospitality Staff

In the literature, few studies have examined the measures employees use to perform their duties and ensure their health and safety. The studies showed that staff in various workplaces have implemented certain measures. For instance, the results from studies conducted among bakeries in Kaduna, Nigeria (Joshua et al., 2017), food industries in Nairobi (Kaylo, 2016), food and beverage industries in South Africa (Maseko, 2016), and hotels in Sri Lanka (Rajini et al., 2012) revealed that the use of PPEs was the common health and safety measure, reported by more than half of the

respondents in the surveys. Similarly, Eyo et al.'s (2025) study, conducted among hotels in Calabar Municipality, indicated that PPE use was widespread among hotel kitchen staff. In contrast, a study by Delfahedah (2022) found that PPE use among hotel employees was uncommon at the Simalungun City Hotel in Indonesia. Likewise, the use of appropriate PPE by staff in the discharge of their duties was reported only in Gaydos et al.'s (2011) study conducted in restaurant kitchens in Chinatown, San Francisco, which focused on hazardous practices among kitchen staff. The results indicate that the use of appropriate protective clothing was uncommon among the staff.

Among the few empirical studies that have explored the reporting of workplace hazards and accidents in the food and beverage sector is Maseko's (2016) study. The finding showed that only 16.8% reported any hazard, unsafe act, or unsafe condition to management. Respondents attributed this low reporting rate to a perceived lack of management commitment to ensuring employee health and safety in the industry.

Aside from being mandatory for employees to attend health and safety training organised by organizations, such training also raises employees' awareness (Cherono, 2011). As such, employees who receive this training can help reduce the number of accidents that lead to injuries, illnesses, and even death. A literature search found that few studies had reported on employees' health and safety training. For instance, Maseko (2016) indicated that more than half of the staff in South Africa's food and beverage industry had received induction training on general workplace health and safety rules. However, in an earlier study conducted specifically in the catering industry, fewer than half of the surveyed caterers had received occupational health and safety training.



From the foregoing analysis of the literature on the measures employees use to ensure health and safety in workplaces, it is evident that little has been reported on the health and safety practices of hotel and restaurant kitchen staff, despite the high rates of injuries and illnesses and even death in these facilities (GSS, 2016; Kini et al., 2025). This situation is largely attributed to inadequate measures to ensure occupational health and safety at most workplaces (Reid et al., 2014).

Socio-demographic Characteristics and Health and Safety Practices

An important aspect of occupational health and safety studies is the relationship between employees' background characteristics and their compliance with safety measures. A study by Kyalo (2016) assessing PPE use among food industry workers in Nairobi found a significant association between PPE use and factors such as age, gender, and work experience. The study also found that PPE use was more common among female employees over 35 and those with more than 6 years of work experience.

A study by Delfahedah (2022) found that PPE use was less prevalent among hotel employees with lower educational backgrounds (78.6%) at the Simalungun City Hotel than among those with higher educational backgrounds (21.4%). The study further revealed that employees with less work experience (94.3%) did not use PPE, compared with those with more work experience (5.7%). Regarding gender, Gyekye and Salminen (2011) report that male employees tend to ignore safety procedures more often than female employees. This may be attributed to males' tendency to take risks.

A similar study conducted among star-rated hotel workers in Addis Ababa, Ethiopia, in 2017 found that background characteristics such as gender, educational status, and hotel grade were

significantly associated with employees' occupational health and safety practices (Bobo, 2017). Variables such as marital status and work experience were not significantly associated with employees' occupational health and safety practices.

MATERIALS AND METHODS

The study was conducted in Accra, the capital city of Ghana. A quantitative research approach and a cross-sectional study design were employed in gathering information from a sample of restaurant kitchen staff at a single point in time. This design was useful for capturing a snapshot of the health and safety practices of hotel and restaurant kitchen staff, providing a representative overview of the findings at the time of data collection.

The study employed a six-stage sampling technique to select the number of hotel and independent restaurant kitchen staff. The procedure began by using the GTA Catering and Hotel Directories to group licensed accommodation and food service facilities in Accra into independent restaurants and hotel restaurants (Table 1). This was followed by sub-groupings of hotels by star rating and of independent restaurants by grade, with the following breakdowns: Hotels: 5-Star (3), 4-Star (8), 3-Star (6), 2-Star (65), and 1-Star (102); Independent restaurants: Grade 1 (49), Grade 2 (123), and Grade 3 (32). The third stage was devoted to sample allocation of the facilities. Fifty percent of the facilities in each stratum of hotels or restaurants were selected to form the facility sample. In all, 93 hotels and 103 independent restaurants were selected for the study. At stage 4, the lottery method was used to randomly select a specific number of facilities in each star and grade stratum. Stage 5 involved allocating kitchen staff to each stratum. Here, a 10% sampling fraction was applied to the total number of staff in each selected facility type. This resulted in 618 respondents: 303 from hotel



restaurants and 315 from independent restaurants (Table 1). The sixth stage was the selection of the respondent. A convenience sampling method was used to select the respondents due to a shortfall in staff availability, attributed to reduced patronage and COVID-19 layoffs.

Data were collected from the kitchen staff using interview schedules. The instrument focused on the health and safety practices of kitchen staff, using closed-ended response options (Yes/No) aligned with the requirements outlined in the ILO guidelines (ILO, 2009) and the Ghana Labour Act (Act 651). The instrument also covered socio-

demographic and work-related characteristics, such as gender, age, level of education, type of restaurant kitchen, employment status, kitchen position, and respondents' work experience. In total, data were obtained from 320 kitchen staff.

The data collection exercise took place mainly after breakfast or during lunch, depending on the interview time. Kitchen staff at independent restaurants were primarily interviewed during lunch service, when they were more accessible. Each interview session lasted 45 minutes. Staff practices were observed alongside the interviews, and both activities were conducted on the same day.

Table 1: Selected Facilities and Respondents

Hotels						Restaurants					
Rating	No. of HR (A)	Pop. of KS (B)	Total Pop. of KS (A*B)	Sampled KS (10% of A*B)	Sampled HR (50% of A)	Grade	No. of IR (A)	Pop. of KS (B)	Total Pop. of KS (A*B)	Sampled KS (10% of A*B)	Sampled IR (50% of A)
5-Star	3	60	180	18	2	Grade 1	49	20	980	98	25
4-Star	8	45	360	36	4	Grade 2	123	15	1845	185	62
3-Star	6	30	180	18	3	Grade 3	32	10	320	32	16
2-Star	65	20	1300	130	33						
1-Star	102	10	1020	102	51						
Total	184	165	3040	303	93		204	45	3145	315	103

NB. HR is Hotel Restaurant, IR Independent Restaurant, and KS Kitchen Staff

Source: Field survey, 2021

Before the interviews began, the head of the kitchen or the manager typically accompanied the researcher on a brief tour to observe relevant staff practices. Where appropriate, photographs were taken with the consent of both staff and management. Ethical clearance for the study was sought from the Institutional Review Board (IRB) of

the University of Cape Coast. On all occasions prior to data collection, informed consent was obtained from participants. The purpose of the study was clearly explained to each respondent and assurances were given regarding their anonymity and the confidentiality of all information provided. Participation was entirely voluntary and respondents



were informed of their right to withdraw at any stage of the interview.

The data were analysed using SPSS version 28. Health and safety practices were examined across demographic and occupational variables, including gender, age, level of education, type of restaurant kitchen, employment status, kitchen position, and work experience. A chi-square test of independence was used to assess associations between these variables and health and safety practices by staff. Statistical significance was set at $p \leq 0.05$.

FINDINGS

Table 2 shows that slightly more than half (56.6%) of the respondents were female, while 43.4% were male. The majority (69.4%) were under

35 years old, and about two-thirds (66.6%) were not married. Nearly 74% of the kitchen staff had secondary education qualifications. In terms of employment characteristics, 56.9% worked in independent restaurant kitchens, while the remaining 43.1% worked in hotel restaurant kitchens. Among those who worked in hotels, 34.8% worked in upmarket hotels, 47.1% in 2-star hotels, and 18.1% in 1-star hotels. For those working in restaurants, 41.2% worked in grade-2 restaurants, 35.7% in grade-3 restaurants, and 23.1% in grade-1 restaurants. Approximately 89% of the respondents were employed as permanent staff in restaurant kitchens. Overall, there were more Cooks (55.0%) than Chefs (30.0%). A greater proportion (84.1%) of respondents had been working at their current workplace for less than 10 years

Table 2: Socio-demographic Characteristics of Respondents

Variable	Frequency (N = 320)	Percentage (%)
Gender		
Male	139	43.4
Female	181	56.6
Age		
< 35 years	222	69.4
35 & above	98	30.6
Level of Education		
Basic Education	36	11.2
Secondary Education	236	73.8
Tertiary Education	48	15.0
Type of facility		
Independent Restaurant	182	56.9
Hotel restaurant kitchen	138	43.1
Status of Workers		
Permanent	284	88.8
Temporal	36	11.2
Staff position in kitchen		
Chef	96	30.0
Cook	176	55.0
Kitchen assistant/Steward	48	15.0
Experience of workers		
< 10 Year	269	84.1
10 years & above	51	15.9



Health and Safety Measures Adopted by Kitchen Staff in Hotels and Restaurants

Figure 1 illustrates the percentage of workers engaged in health and safety measures in hotel and restaurant kitchens. Mainly, four health and safety measures were carried out by the kitchen staff. These ranged from updates to knowledge and skills in health and safety (training), use of PPE, reporting hazards/accidents, and following instructions/procedures. Generally, Figure 1 shows that fewer than half of the respondents engaged in

any of the health and safety measures. Nevertheless, the use of PPE emerged as the most effective and safety-conscious measure implemented by respondents in the kitchens (45%). Updating knowledge and skills in safety and health ranked second as the most significant health and safety measure among the kitchen staff (26%). This was followed by the practice of reporting hazards and accidents (16%). The measure least adhered to by respondents was following instructions and procedures (13%).

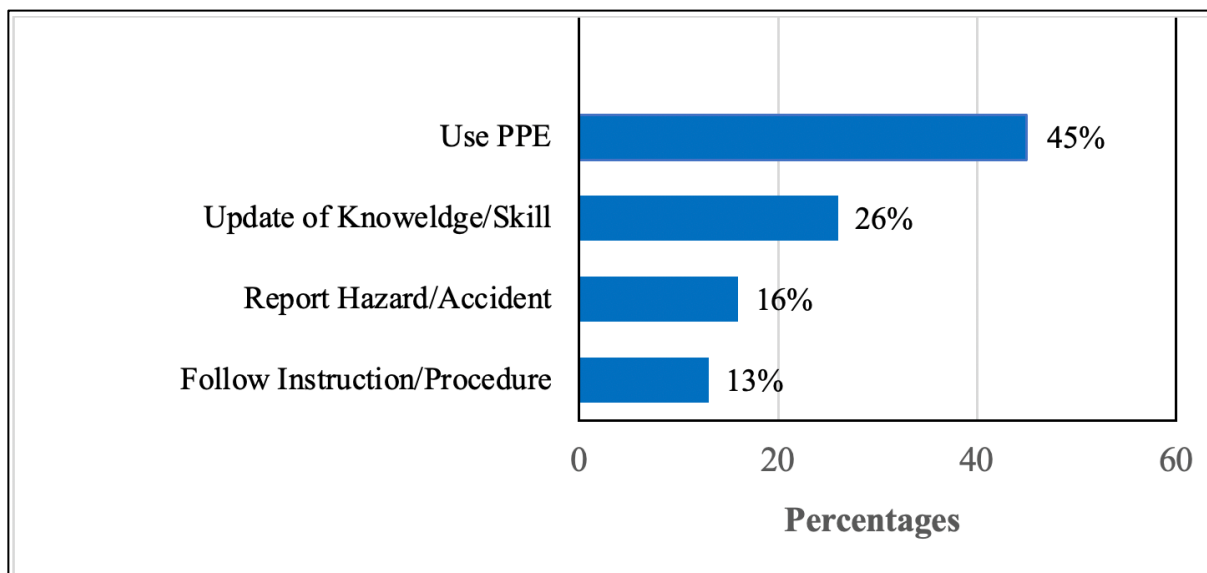


Figure 1: Measures Employed by Kitchen Staff

Although PPE was identified as the primary measure staff used to ensure health and safety in restaurant kitchens, observations revealed that employees wore PPE that was not appropriate and, in some instances, it was not appropriate for the assigned tasks. Evidence of inappropriate PPE observed during the study is presented in Plate 1.

As shown in Picture 1, the respondent wore a lightweight polyester apron that was not waterproof and therefore offered limited protection against burns from hot liquids, a common hazard for chefs and cooks in routine kitchen operations.

Besides, the respondent was not wearing a chef's jacket, which is designed to provide insulation and protection against hot liquids, steam, and open flames commonly encountered in the kitchen.

The gloves worn by the respondents in Picture 2 were standard synthetic rubber gloves, not cut-resistant gloves designed for food-preparation tasks involving sharp equipment. This finding is particularly concerning because the respondent was observed wearing the gloves while descaling fish, an activity that involves direct contact with sharp knives and fish fins, thereby increasing the risk of



lacerations. The respondent wore the same gloves while frying the fish, despite their limited ability to protect against heat and oil splashes.

The footwear observed among the respondents featured openings that compromise foot protection. The clog shown in Picture 3, a popular

choice of footwear among the kitchen staff due to its slip-resistant properties, lightweight, comfort during extended work shifts, and easy-to-clean characteristics, had ventilated openings, while the sandals shown in Picture 4 had an open design.



1. Non-waterproof apron



2. Synthetic rubber gloves used for fish descaling and frying



3. Clog with ventilated openings



4. Open-design sandals

Plate 1: Inappropriate PPE Used by Staff in the Restaurant Kitchens

Table 3 presents the actions taken by staff to promote health and safety in hotels and restaurant kitchens, categorised by background characteristics. A chi-square test of independence was used to examine associations between variables. The results indicate that many of the relationships across

variables were statistically significant. For instance, significant associations were found between all reported health and safety practices, namely updating knowledge and skills, using PPE, reporting hazards and accidents, and following instructions or procedures, and respondents' sex, educational level,



and positions held within the kitchen. The practice of using PPE in the kitchen was also statistically significant with respect to the type of restaurant kitchen ($\chi^2 = 15.78$; $p = 0.000$) and respondents' work experience ($\chi^2 = 8.81$; $p = 0.003$). In contrast, no statistically significant relationships were observed between the use of PPE as a health and safety measure among kitchen staff and their age or

mode of employment. However, an exception was found in the practice of following instructions and procedures to ensure health and safety, which was statistically associated with both age ($\chi^2 = 16.22$; $p = 0.000$) and mode of employment ($\chi^2 = 4.54$; $p = 0.033$), but not with the type of restaurant kitchen and workers' years of experience.

Table 3: Health and Safety Measures Employed by Kitchen Staff by Demographic Characteristics

Characteristics	Measures of health and safety (%)			
	UKS	UPPE	RHA	FIP
Sex				
Male	58.7	71.0	92.4	74.8
Female	47.8	61.6	77.3	65.7
χ^2 (<i>p-value</i>)	18.59 (0.001)	21.47 (0.001)	26.54 (0.001)	6.13 (0.013)
Age				
< 35 years	51.8	65.1	82.4	74.5
35 & above	54.3	67.1	87.2	58.7
χ^2 (<i>p-value</i>)	0.84 (0.359)	0.79 (0.374)	2.33 (0.127)	16.22 (0.001)
Level of Education				
Basic Education	61.7	62.7	91.7	50.0
Secondary Education	48.8	64.7	80.5	72.0
Tertiary Education	64.2	72.9	94.8	72.9
χ^2 (<i>p-value</i>)	25.60 (0.001)	9.49 (0.009)	15.67 (0.001)	14.92 (0.001)
Type of restaurant kitchen				
Independent restaurant	50.3	62.2	84.3	72.0
Hotel restaurant	55.5	70.3	83.3	66.7
χ^2 (<i>p-value</i>)	4.22 (0.040)	15.78 (0.001)	0.12 (0.731)	2.10 (0.148)
Mode of Employment				
Permanent	52.9	65.6	83.5	68.3
Temporal	50.0	66.3	87.5	80.6
χ^2 (<i>p-value</i>)	0.53 (0.465)	0.04 (0.844)	0.78 (0.378)	4.54 (0.033)
Position in kitchen				
Chef	61.9	71.6	95.8	78.6
Cook	47.6	62.3	76.1	64.2
Kitchen Assistant/Steward	52.1	66.4	88.5	71.9
χ^2 (<i>p-value</i>)	25.36 (0.001)	16.55 (0.001)	37.49 (0.001)	12.52 (0.002)



Work experience

< 10 Year	82.4	64.4	82.2	70.4
10 & above	68.3	72.5	93.1	65.7
χ^2 (p-value)	4.19 (0.041)	8.81 (0.003)	7.66 (0.001)	0.92 (0.338)

Source: Field survey (2021)

NB: Update of knowledge and skill (UKS); Use of personal protective equipment (UPPE); Report hazards/accidents (RHA); Follow instructions/procedures (FIP)

Significance level at $p < 0.05$

The study also reveals that a high proportion of respondents across the variables reported engaging in key safety practices, including the use of personal protective equipment (PPEs), reporting of hazards or accidents, and adhering to safety instructions and procedures in the kitchens. However, despite a statistically significant relationship established between the practice of updating knowledge and skills as a health and safety measure and staff characteristics such as sex ($\chi^2 = 18.59$; $p = 0.000$), level of education ($\chi^2 = 25.60$; $p = 0.000$) and staff positions in the kitchens ($\chi^2 = 25.36$; $p = 0.000$), notable variations were observed in the proportions of respondents engaging in this practice across the different demographic cohorts. For instance, a higher proportion of male respondents (51.8%) reported updating their knowledge and skills than female respondents (47.8%). Similarly, respondents with tertiary education (64.2%) and those with basic education (61.7%) were more engaged in this practice than those with secondary education (48.8%). In terms of kitchen roles, chefs (61.9%) and kitchen assistants or stewards (52.1%) reported higher rates of updating in their knowledge and skills than cooks (47.6%).

DISCUSSION

According to the results, hotel and restaurant kitchen staff primarily used PPE to ensure

health and safety. However, less than half of the respondents engaged in this practice. This behaviour contradicts the Ghana Labour Act, which mandates that every worker use safety appliances, including PPE, in the workplace. The finding that PPE use was the most common health and safety measure among kitchen staff is consistent with observations made by Rajini et al. (2012) in their study of hotel kitchen workers in Sri Lanka and by Eyo et al. (2025) in their study of hotel employees in Calabar Municipality, Nigeria. The findings also revealed that the PPE used by most kitchen staff was inappropriate for the tasks. These observations suggest a mismatch between the protective properties of PPE and the hazards associated with the tasks being undertaken. This finding is concerning, as the proper use of PPE is a critical measure for controlling hazards and preventing unnecessary injuries in restaurant kitchens. For instance, appropriate footwear is necessary to protect respondents' feet from workplace hazards, such as hot liquid spills and falling objects. Staff using the wrong PPE in the workplace not only puts them at risk but may also endanger the lives of their colleagues through potentially work-related injuries and illnesses. The finding indicates a potential lapse in management responsibility to supervise staff activities as required under the Ghana Labour Act to safeguard employees' safety and health. This observation aligns with findings from a study conducted in



China and San Francisco, in which Gaydos et al. (2011) reported that inappropriate protective clothing was common among restaurant kitchen staff.

Updating knowledge and skills related to health and safety emerged as the second most important measure among hotel and restaurant kitchen staff. The finding also showed that only about a quarter (26%) of employees received workplace training on health and safety protocols. This suggests a failure by employers to meet their legal obligation under the Ghana Labour Act to provide health and safety training, which is essential for fostering a safer working environment for all workers. The limited number of staff updating their knowledge and skills in health and safety practices contradicts Maseko's (2016) findings, which reported that more than half of food and beverage staff in South Africa have received induction training on general workplace health and safety rules.

The results further showed that fewer than one-fifth (16%) of respondents reported hazards and accidents in the kitchen environment, despite the explicit requirement in the Ghana Labour Act that employees promptly report imminent or serious hazards to their immediate supervisors. The low reporting rate is alarming, given that the kitchen environment is hazardous (Maseko, 2016; Mondal, 2012) due to workers' exposure to high temperatures, use of sharp utensils, walking on slippery floors, and working with flammable materials. Occupational health and safety literature has emphasised that these conditions can have far-reaching consequences, including disruptions in productivity (Hughes & Ferrett, 2013) and increased health care costs, long-term disability, severe cases, and fatalities (WHO/ILO, 2021). This reluctance or failure of the majority of respondents to report kitchen hazards or accidents, as required by law,

also raises critical concerns about workplace health and safety culture, staff awareness of legal responsibilities, and the potential effectiveness of existing safety management systems in hotels and restaurants. The low rate of respondents reporting hazards or accidents to management in hotel and restaurant kitchens in Accra aligns with Maseko's (2016) findings from a related study conducted in the South African food and beverage sector.

The results demonstrate associations between respondents' sex, educational attainment, and positions held in the kitchen and their use of PPE, reporting of hazards and accidents, adherence to instructions or established procedures, and updating knowledge and skills. Moreover, the use of PPE, updating knowledge and skills, and reporting of hazards and accidents were significantly associated with respondents' work experience. These findings suggest that demographic variables have a notable influence on individual behaviour, aligning with Andersen's Behavioural Model (Andersen, 1968), which posits that predisposing factors such as demographic factors shape behavioural outcomes. The observed association between respondents' use of PPE and sex may be linked to differences in risk perception and safety socialization, with female staff more likely to perceive higher risk and therefore comply with safety measures, while male staff may underestimate risk and refrain from using PPE in the discharge of their duties. Another reason for the relationship may be an organizational factor, such as gender-based role assignment, which affects staff hazard exposure and the expectations placed on PPE usage. Having an observed significance of PPE use in relation to work experience can also be linked to the reason that more experienced kitchen staff are likely to have greater exposure to safety training and workplace hazards and injuries, which increases their risk awareness and encourages consistent use of PPE, in



contrast to less experienced staff, who may have limited training and hazard recognition, leading to lower compliance. The observed significance of PPE use in relation to sex and work experience corroborates the findings of Kyalo's (2016) study, which revealed similar patterns among food industry workers in Nairobi.

CONCLUSION AND RECOMMENDATIONS

Hotel and restaurant kitchen staff practiced the use of PPEs, updating of knowledge and skills, reporting of hazards or accidents, and following safety instructions and procedures to ensure safety and health. Overall, staff adoption of occupational health and safety measures in the hotel and restaurant kitchens is insufficient. While PPE usage was recognised primarily as a health and safety measure employed by the kitchen staff to ensure safety and health, it was often used inappropriately. The majority of the kitchen staff did not fully implement the health and safety practices as required by the ILO and the Ghana Labour Act. Demographic factors such as sex, educational attainment, positions held in the kitchen, and work experience have a significant influence on the health and safety behaviours of kitchen staff, as explained by Andersen's Behavioural Model, therefore underscoring the need for targeted intervention to help prevent the occurrence of workplace injuries and illnesses.

To address insufficient adoption of health and safety practices in the kitchen and improper use of PPE by staff while performing their duties, hotel and restaurant managers need to enforce stricter oversight of staff adherence to all health and safety protocols, particularly the proper use of PPE. Moreover, Management should consider introducing award and incentive schemes to encourage the consistent use of appropriate PPE by all staff. With support from the National Restaurant

Association and Ghana Hotels Association, hotels and restaurants should also develop and implement comprehensive, structured health and safety education programmes. These programmes would play a crucial role in raising staff awareness of workplace hazards and reinforcing the importance of using the correct PPE during daily tasks. This will also help foster a culture of health and safety in the kitchen. Strengthening these measures will ultimately contribute to a safer and healthier workplace for all kitchen staff.

Additionally, the Ministry of Employment and Labour Relations, in collaboration with GTA, should organise workshops and seminars to educate employees about their legal rights and responsibilities regarding health and safety in hotels and restaurants. Managers should also strengthen hazard communication protocols by establishing transparent, accessible, and non-punitive reporting systems to protect employees' well-being in kitchens. This initiative will promote confidence and encourage employees to report existing hazards and accidents in the kitchen.

The study also recommends a follow-up qualitative study to provide a deeper explanation of employees' adherence to health and safety measures in restaurant kitchens. Other studies should use participatory observation to document actual events in hotel and restaurant kitchens regarding health and safety practices. Further studies should also focus on other sectors, such as front offices and housekeeping, to uncover what is happening in these areas of the hospitality industry.

Limitations

The study focused on selected hotels and restaurants in Accra rather than the entire Greater Accra region and other regions, where conditions might differ. Also, the study adopted a quantitative research approach that relied on scheduled,



structured interviews, thereby limiting respondents' ability to provide deeper explanations regarding health and safety practices. The use of self-reported data may have introduced social desirability bias, as some employees may have provided responses that they considered acceptable rather than reflecting their actual practices.

Another limitation of this study is that it examined only the predisposing factors (demographic characteristics) of Andersen's Behavioral Model and not the enabling factors (e.g., availability of PPE, management support, and safety budget) and the need factors (perceived risk, prior injuries) as other determinants of the behaviour of the hotel and restaurant kitchen staff. This implies that the study did not capture all the determinants influencing behaviour outcomes as postulated in Andersen's Behavioural Model. This exclusion limits generalisation of the findings regarding the application of Andersen's Behavioural Model to understanding the behavioural outcomes among hotel and restaurant kitchen staff of the hospitality industry.

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HOSPITALITY MANAGERS' PERCEPTIONS OF THE EFFECT OF GREEN HUMAN RESOURCE MANAGEMENT PRACTICES ON PROGRESS TOWARDS ACHIEVEMENT OF THE SUSTAINABLE DEVELOPMENT GOALS IN GHANA

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Abstract

This study examined hospitality managers' perceptions of the effect of Green Human Resource Management (GHRM) practices on perceived progress toward SDGs 6, 11, 12, and 14 among hospitality establishments in Accra, Ghana. Specifically, the study assessed the effects of green recruitment and selection, green performance management and appraisal, green training and development, and green reward and compensation on SDGs 6, 11, 12, and 14. A quantitative approach and explanatory research design were adopted. Data were collected from 105 hospitality establishments selected through simple random sampling. All 105 questionnaires administered were returned and used for analysis, representing a 100% response rate. Data were analysed using Smart PLS-SEM 4. The findings revealed that green recruitment and selection, green training and development, and green reward and compensation had statistically insignificant relationships with the SDGs. In contrast, green performance management and appraisal demonstrated a statistically significant positive relationship with the SDGs. The study concludes that while GHRM practices remain important for promoting sustainability, their effectiveness varies across dimensions. Hospitality establishments should strengthen the integration of environmental performance indicators into appraisal systems to enhance employee accountability and support progress toward SDGs 6, 11, 12, and 14. The findings contribute to the growing literature on GHRM and sustainable development in Ghana's hospitality sector.

Keywords: Environmental Sustainability, Green Human Resource Management, Hospitality Industry, Marine Ecosystem, Sustainable Development Goals.

INTRODUCTION

The hospitality industry in Ghana, as highlighted by the Ghana Statistical Service (GSS, 2022), has emerged as a dynamic and essential sector, significantly contributing to the country's economic growth and employment through its diverse offerings, including hotels, resorts, restaurants, and tourism services (Otoo, 2019). The GSS (2023) estimates that the industry contributes approximately 5.5% to Ghana's GDP, underscoring its critical role in the nation's economic landscape. However, despite these positive contributions, Mensah (2019) asserts that the sector faces numerous challenges that threaten its sustainability and environmental impact. For instance, a report by the Environmental Protection Agency (EPA) of Ghana, as noted by Milla-Amekor (2024), reveals

that many hospitality establishments exhibit limited compliance with environmental regulations, resulting in issues such as poor waste management, high energy consumption, and water pollution. The hospitality industry in Ghana, particularly in Accra, faces significant environmental challenges linked to rapid urbanisation, population growth, and inadequate waste management infrastructure (Arthur et al., 2023; Hart, 2022). Inefficient waste collection and disposal practices, such as open dumping and burning, contribute to soil and water contamination, air pollution, and degraded ecosystems, including water bodies like the Sea, Korle Lagoon, and Odaw River (Anokye et al., 2024; Clotey et al., 2022; Ntjal et al., 2022). These issues are exacerbated during rainy seasons when clogged drainage systems lead to flooding,

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Doi: 10.47963/ajhtm.v5i2.1661



worsening sanitation conditions, and spreading waterborne diseases like cholera and dysentery (Owusu & Obour, 2021; Yeboah et al., 2024).

This study integrates the resource-based view (RBV) and the theory of planned behaviour (TPB) to address sustainability challenges. The RBV focuses on strategically managing internal resources, such as green-skilled employees, for competitive advantage, while the TPB explains how these resources can be motivated to exhibit behaviours that support organisational sustainability goals (Conner & Armitage, 1998; Madhani, 2010). This integration highlights how Green Human Resource Management (GHRM) practices can foster pro-environmental behaviours and align human capital with Sustainable Development Goals (SDGs). As underscored by Sakshi et al. (2020) and Legrand et al. (2022), the hospitality industry plays a critical role in addressing sustainability challenges due to its significant environmental impact. GHRM has emerged as a key strategy to integrate sustainability into workforce management, including practices like green recruitment, training, performance management, and reward systems (Joshi et al., 2023; Roscoe et al., 2019).

Green recruitment and selection are key elements of GHRM, focusing on hiring individuals with relevant skills who share a commitment to environmental sustainability (Jamil et al., 2023; Pham & Paillé, 2020). Green performance management and appraisal systems assess employee contributions to sustainability using indicators such as waste reduction and energy efficiency (Ardiza et al., 2021; Fernandez & Ganesan, 2023). Green training and development equip employees with eco-friendly skills and behaviours (He & Zaman, 2024; Yusoff, 2015), while green reward and compensation systems motivate sustainability performance through incentives (Ahmed et al., 2021; Pham et al., 2019).

Despite growing scholarly attention to GHRM and sustainability (e.g., Chams & García-Blandón, 2019; Zubair & Khan, 2019; Roscoe et al., 2019), empirical evidence remains fragmented regarding how specific GHRM practices translate into progress toward SDGs within the hospitality sector, particularly in developing country contexts such as Ghana. This indicates a contextual and sector-specific gap in understanding the behavioural and managerial mechanisms through which GHRM contributes to sustainability outcomes. Empirical observations further suggest weak adoption of sustainability-oriented practices in the Ghanaian hospitality sector, where only 30% of establishments have adopted sustainable practices (GTA, 2022), limiting their contribution to environmental sustainability. In addition, over 60% of hospitality establishments fail to comply with waste disposal regulations (EPA, 2022), raising concerns about environmental degradation and regulatory enforcement. (GTA, 2022; EPA, 2022).

Moreover, existing studies have largely focused on macro-level sustainability issues, with limited attention to how employee-level behaviours and HRM systems jointly influence SDG implementation in hospitality organisations. This creates a clear gap in linking GHRM practices to specific SDGs, particularly SDG 6 (Clean Water and Sanitation), SDG 11 (Sustainable Cities and Communities), SDG 12 (Responsible Consumption and Production), and SDG 14 (Life Below Water) within coastal hospitality settings in Accra. Consequently, this study examines hospitality managers' perceptions of the effect of Green Human Resource Management practices on progress toward the achievement of Sustainable Development Goals in Ghana's hospitality industry. Specifically, it evaluates how green recruitment and selection, green training and development, green performance management and appraisal, and green reward and



compensation influence SDG outcomes in coastal hospitality establishments in Accra. The study also identifies key challenges and barriers affecting the effective implementation of GHRM practices in the sector.

LITERATURE REVIEW

Theoretical Review

The resource-based view (RBV) Theory, introduced by Jay Barney in 1991, highlights that an organisation's competitive advantage stems from internal resources that are valuable, rare, inimitable, and non-substitutable (VRIN) (Chacha, 2010). These resources, including technology, infrastructure, skills, and organisational culture, significantly influence organisational performance and success (Rantanen, 2021). In Green Human Resource Management (GHRM), RBV underscores human resources as critical assets for driving sustainability initiatives (Jamil et al., 2023). Practices like green recruitment, training, and performance management align workforces with environmental sustainability, enabling organisations to achieve sustainability goals. However, RBV faces criticism for focusing primarily on internal resources while overlooking external factors such as market dynamics and competition.

Despite this, RBV is pivotal in linking GHRM to Sustainable Development Goals (SDGs) by leveraging human capital for sustainable development. Furthermore, the theory of planned behaviour (TPB), developed by Icek Ajzen in 1985, explains individual actions through three components: attitude toward behaviour, subjective norms, and perceived behavioural control (Hagger, 2019). These elements shape behavioural intention, which predicts actual behaviour (Ajzen, 2011). Within GHRM, TPB demonstrates how green initiatives, such as training and performance

management, influence employee attitudes and behaviours toward sustainability. These practices foster pro-environmental behaviours and enhance employees' perceptions of their ability to support environmental goals. Although TPB has been criticised for emphasising intention over unconscious behaviours or external constraints, it remains a valuable tool for structuring GHRM practices to influence employee behaviours toward achieving sustainability objectives.

The RBV and TPB theories complement each other by integrating internal resource management with employee behavioural perspectives (Madhani, 2010). RBV focuses on leveraging green-skilled employees for a competitive advantage, while TPB explains how these employees can be motivated to exhibit behaviours supporting sustainability goals (Conner & Armitage, 1998). This integration is particularly relevant in Ghana's hospitality industry, where GHRM practices (RBV) and pro-environmental behaviours (TPB) can collectively advance SDGs. Together, these theories provide a strategic and behavioural framework for examining the impact of GHRM on sustainable development.

Conceptual Review

The role of green HRM in sustainable development goals

The study of sustainability within HRM emerged to address the growing demand for sustainable development. Roorda (2020) emphasises sustainable development as meeting current needs without hindering future generations' ability to meet theirs. Achieving sustainability requires a deep cultural and societal transformation that fosters new collective values and beliefs (Hammond, 2021). According to Wijaya and Mursitama (2023),



Elkington's concept of the Triple Bottom Line emphasises a balanced approach to sustainable development, urging businesses to consider social, environmental, and economic impacts. This approach reflects a paradigm shift that prioritises social and environmental performance alongside economic growth. Green HRM evolved as a response to traditional HRM practices to focus on addressing environmental challenges.

In line with the transformative 2030 Agenda for Sustainable Development, the United Nations established 17 Sustainable Development Goals (SDGs) and 169 associated targets, providing a framework for actionable and collaborative solutions to global sustainability challenges. Six out of the seventeen SDGs are directly crafted to achieve environmental sustainability. These six SDGs (SDGs 6, 7, 11, 12, 13, and 14) focused on clean water and sanitation, affordable and clean energy, sustainable cities and communities, responsible consumption and production, climate action, and finally, life below water. Companies play a crucial role in achieving these goals, particularly SDG 6, 11, 12, and 14, which call for responsible consumption and production. This includes adopting sustainable practices and integrating sustainability into GHRM practices. Research highlights the critical role of HRM in tackling sustainability challenges, emphasising the importance of employees as key agents of change (Podgorodnichenko et al., 2020; Podgorodnichenko et al., 2022). Unlike traditional HRM, Green HRM incorporates environmental management into all HRM functions and practices. By aligning HRM strategies with environmental objectives, employees can drive more sustainable production processes and product development, significantly contributing to achieving sustainable consumption and production patterns as outlined in SDGs 6, 11, 12, and 14.

Empirical Review

Extant literature highlights the growing relevance of Green Human Resource Management (GHRM) in advancing environmental sustainability and Sustainable Development Goals (SDGs). Studies such as Ali et al. (2021) and Baffoe et al. (2021) emphasise broader sustainability frameworks in Ghana, including green economy transitions and SDG interlinkages, but they do not directly focus on HRM mechanisms within specific sectors. Similarly, Chams and García-Blandón (2019) and Zubair and Khan (2019) conceptualise sustainable HRM as a key driver of organisational sustainability and environmental responsibility, highlighting its potential to embed eco-friendly values in organisational systems.

Empirical studies further demonstrate the positive influence of GHRM practices on employee behaviour and sustainability outcomes. Mishra (2017) and Genty (2021) show that green HR practices such as training, recruitment, and rewards enhance pro-environmental behaviour and organisational sustainability. In the African context, Kissi et al. (2024) confirm a significant relationship between GHRM practices and environmental sustainability among Ghanaian workers, while Liu et al. (2022) provide evidence that GHRM positively affects employee attitudes and sustainable consumption behaviours, particularly through mediating mechanisms such as skills and values. Likewise, Ghani et al. (2024) and Roscoe et al. (2019) establish that GHRM significantly influences proactive employee environmental behaviour in emerging economies. Overall, the literature consistently indicates that GHRM is a key enabler of sustainability, particularly through employee behaviour change, organisational identification, and managerial support systems.



Research Gaps

Despite increasing scholarly attention to GHRM and sustainability, several critical gaps remain. First, most studies (e.g., Ali et al., 2021; Baffoe et al., 2021) focus on macro-level sustainability issues such as green economy policies and SDG interlinkages, with limited attention to sector-specific applications of GHRM. Second, although empirical evidence exists on GHRM and environmental sustainability (e.g., Kissi et al., 2024; Liu et al., 2022), these studies are largely multi-sectoral or manufacturing-based, with minimal focus on the hospitality industry, which has distinct environmental challenges and sustainability pressures. Furthermore, existing research has not sufficiently examined how specific GHRM practices translate into SDG achievement within developing-country hospitality contexts, particularly through employee behaviour and managerial perceptions. Methodologically, while studies such as Mishra (2017) and Ghani et al. (2024) employ robust quantitative techniques, there remains limited context-specific empirical work integrating GHRM and SDGs in Ghana's hospitality sector using explanatory models. Therefore, a clear gap exists in understanding how Green HRM practices influence progress toward SDGs within the Ghanaian hospitality industry, particularly from the perspective of employee behaviour, managerial perception, and sector-specific sustainability challenges.

Hypotheses Development

Based on the theoretical arguments and empirical evidence that GHRM practices enhance employee environmental behaviour and sustainability outcomes (Mishra, 2017; Kissi et al., 2024; Liu et al., 2022), this study posits that the key

dimensions of GHRM are positively associated with progress towards Sustainable Development Goals (SDGs) performance in the hospitality industry. Accordingly, the following hypotheses are derived:

H1: Green recruitment and selection is positively related to perceived progress towards Sustainable Development Goals in the hospitality industry.

H2: Green performance management and appraisal is positively related to perceived progress towards Sustainable Development Goals in the hospitality industry.

H3: Green training and development is positively related to perceived progress towards Sustainable Development Goals in the hospitality industry.

H4: Green reward and compensation is positively related to perceived progress towards Sustainable Development Goals in the hospitality industry.

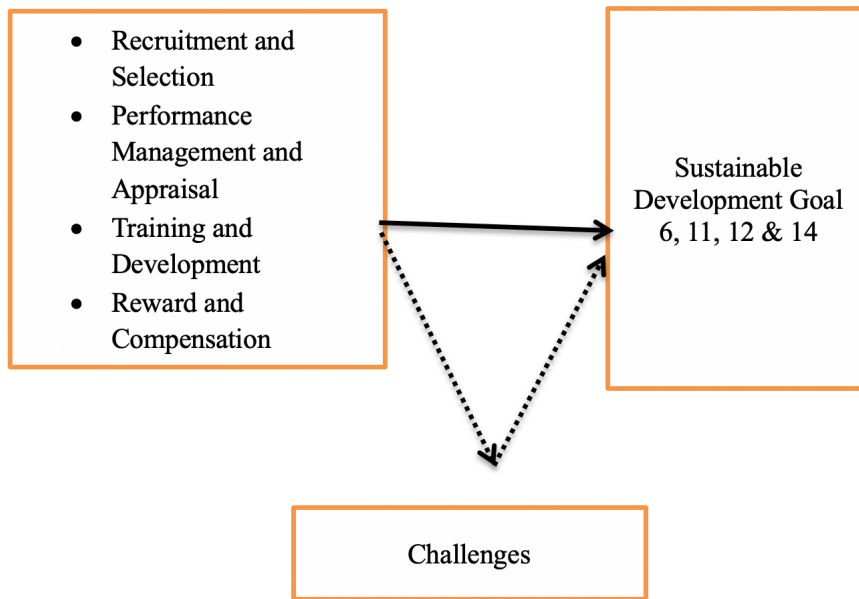
In addition, the study seeks to explore challenges faced by hospitality organisations in implementing GHRM practices in Ghana's hospitality sector.

Conceptual Framework

Figure 1 illustrates the relationship between Green Human Resource Management practices and Sustainable Development Goals in the hospitality industry of Ghana. The figure below illustrates the relationship between Green Human Resource Management practices and Sustainable Development Goals in the hospitality industry of Ghana.



GHRM Practices

**Figure 1: Conceptual Framework**

Source: Authors (2024)

METHODS**Research Approach and Design**

The research approach and design are fundamental for aligning the research paradigm with appropriate data collection and analysis methods. Strijker et al. (2020) identify three primary research approaches: qualitative, quantitative, and mixed methods. Given the study's focus on examining hospitality managers' perceptions of the effect of Green HRM practices on progress toward the achievement of the Sustainable Development Goals (SDGs) within Ghana's hospitality industry, a quantitative approach was deemed appropriate because it allows for the empirical testing of relationships between variables using statistical techniques. This study prioritised a quantitative approach to generate measurable data and provide empirical evidence regarding the relationship between Green HRM practices and perceived progress toward SDGs 6, 11, 12, and 14. In terms of research design, Bell et al. (2022) describe research

design as the overall framework for conducting a study. An explanatory research design was adopted to examine how Green HRM practices influence managers' perceptions of organisational progress toward SDGs 6 (Clean Water and Sanitation), 11 (Sustainable Cities and Communities), 12 (Responsible Consumption and Production), and 14 (Life Below Water). The design was considered suitable because it facilitates the examination of relationships among variables and the identification of factors associated with sustainability-related outcomes.

Population and Sampling Procedure

The population for this study comprised licensed hospitality establishments located within the coastal communities of Accra, including hotels, resorts, and recreational centres. According to the Ghana Tourism Authority (GTA, 2023), more than 150 licensed hospitality establishments operate within the study area. However, following an initial screening based on accessibility, operational status,



willingness to participate, and the presence of managerial personnel knowledgeable about environmental and HRM practices, 105 establishments met the inclusion criteria and constituted the accessible study population. The unit of analysis for this study was the hospitality establishment, represented by one managerial respondent from each establishment. Consequently, data were collected from 105 managers representing 105 hospitality establishments. The findings should therefore be interpreted as organisational-level perceptions reported by key informants rather than individual employee perceptions. Given the absence of a comprehensive sampling frame of managers and the practical challenges associated with obtaining access to all establishments, a purposive sampling technique was employed. Managers occupying positions such as General Manager, Human Resource Manager, Operations Manager, and Sustainability Officer were selected because of their knowledge of organisational HRM and environmental management practices. A total of 105 questionnaires were distributed, and all were returned and deemed usable, resulting in a response rate of 100%.

Instrument for Data Collection

Data were collected using a structured questionnaire consisting of closed-ended items measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire items were adapted from previously validated Green HRM and sustainability studies, including Roscoe et al. (2019), Liu et al. (2022), and Kissi et al. (2024), and were modified to reflect the Ghanaian hospitality context. The Green HRM construct was measured using four dimensions: green recruitment and selection, green performance management and appraisal, green training and development, and green reward and compensation.

The dependent variable was measured as managers' perceived progress toward SDGs 6, 11, 12, and 14 rather than actual SDG achievement. Respondents were asked to assess the extent to which their organisations had made progress toward these SDGs using perceptual indicators related to environmental sustainability practices.

Data Collection Procedure

The researchers presented introductory letters to the managers of participating establishments. These letters explained the purpose of the study and sought permission for participation. Respondents were assured of anonymity, confidentiality, and the voluntary nature of participation. The questionnaires were self-administered with the assistance of designated representatives within each establishment. The respondents completed the questionnaires in their respective offices, and the researchers provided clarification whenever necessary. This approach enhanced response quality and facilitated the retrieval of completed questionnaires.

Data Processing and Analysis

The data collected from respondents were analysed using both descriptive and inferential statistical techniques. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were generated using SPSS to summarise respondents' demographic characteristics and key study variables. Given that one respondent represented each hospitality establishment, the analysis reflects organisational-level perceptions regarding Green HRM practices and perceived progress toward SDGs. Smart PLS-SEM was employed to test the hypothesised relationships between Green HRM practices and



perceived progress toward SDGs. The technique was considered appropriate because it effectively handles complex models involving multiple latent constructs and simultaneously assesses measurement and structural models.

RESULTS

Table 1 presents the demographic characteristics of the respondents. The sample was relatively balanced in terms of gender, with 52.4% males and 47.6% females. Most respondents held a first degree (43.8%), while a considerable proportion possessed professional certificates (23.8%) and postgraduate qualifications (14.3%), indicating that the majority had adequate educational backgrounds to provide informed responses. In terms of work experience, over half of the respondents (56.2%) had more than 10 years of experience, indicating that their perceptions were

grounded in substantial industry knowledge. Furthermore, the majority (61.9%) occupied managerial positions, followed by senior staff (30.5%) and owners (7.6%). The demographic profile indicates that the respondents were sufficiently qualified, experienced, and held relevant positions, making them suitable participants for examining the impact of Green Human Resource Management practices on progress toward achieving the Sustainable Development Goals in Ghana.

Figure 2 presents the distribution of the hospitality establishment types included in the study. The results show that hotels and resorts constituted the largest category (60%), followed by restaurants and food service establishments (29%). Recreation and leisure centres accounted for 8%, while other hospitality establishments represented 4% of the sample. This distribution indicates that the study covered a range of hospitality establishment types in Accra.

Table 1: Demographic Information of Respondents

Variables	Options	Frequency	Percentage (%)
Gender	Male	55	52.4
	Female	50	47.6
	Total	105	100.0
Highest qualification	Postgraduate	15	14.3
	First degree	46	43.8
	HND/ Diploma	16	15.2
	Professional certificate	25	23.8
	Others	3	2.9
	Total	105	100.0
Working experience	Less than 5 years	13	12.4
	5 - 10 years	33	31.4
	Over 10 years	59	56.2
	Total	105	100.0
Position	Owner	8	7.6
	Manager	65	61.9
	Senior staff	32	30.5
	Total	105	100.0



Source: Authors (2024)

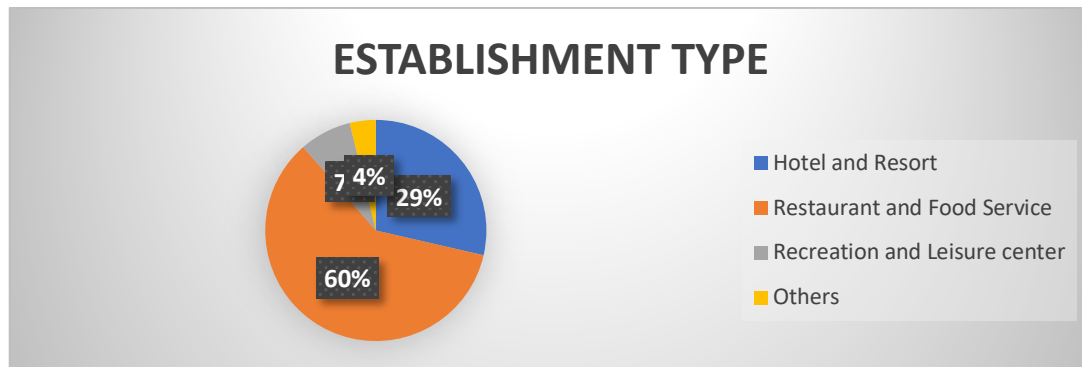


Figure 2: Hospitality Establishment Type

Source: Authors (2024)

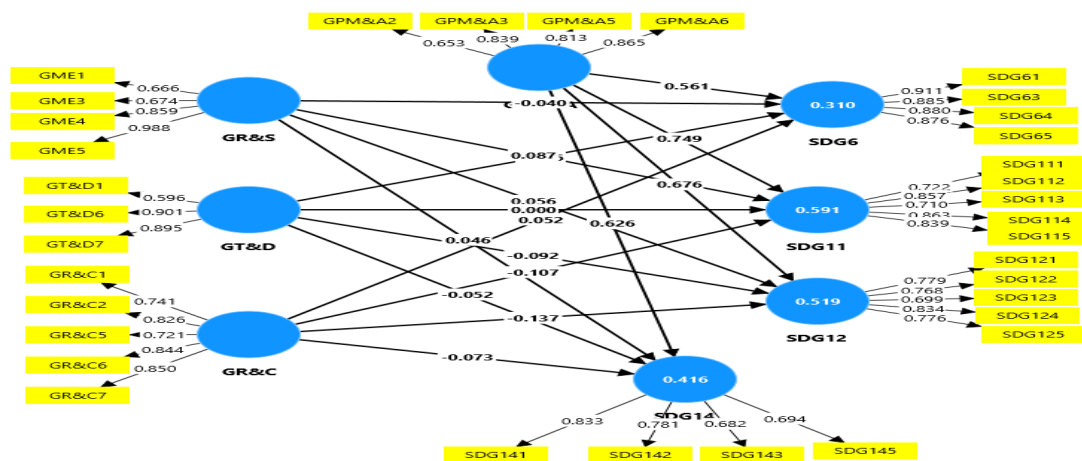


Figure 3: The Measurement Model

Source: Authors (2024)

Figure 3 presents the measurement model, illustrating the relationships between the study constructs and their respective indicators. The model indicates that the measurement items adequately represent the latent constructs, demonstrating acceptable reliability and validity. Therefore, the measurement model is suitable for assessing the structural relationships

Measurement Model Assessment

The measurement model was assessed using indicators of reliability, convergent validity and discriminant validity. Convergent validity was evaluated using Cronbach's alpha, composite reliability, and Average Variance Extracted (AVE). Discriminant validity was evaluated using the HTMT ratio. As shown in Tables 2 and 3 below.

**Table 2: Construct Reliability and Validity**

	Cronbach's alpha	Composite reliability (rho a)	Composite reliability (rho c)	Average variance extracted (AVE)
GPM&A	0.808	0.837	0.873	0.635
GR&C	0.860	0.884	0.897	0.637
GR&S	0.885	0.801	0.880	0.653
GT&D	0.726	0.798	0.847	0.656
SDG11	0.860	0.878	0.899	0.642
SDG12	0.830	0.837	0.880	0.596
SDG14	0.742	0.768	0.836	0.563
SDG6	0.911	0.923	0.937	0.789

Source: Authors (2024)

Table 3: HTMT Ratio Result: Discriminant Validity

	GPM&A	GR&C	GR&S	GT&D	SDG11	SDG12	SDG14	SDG6
GPM&A								
GR&C	0.120							
GR&S	0.084	0.712						
GT&D	0.128	0.824	0.730					
SDG11	0.866	0.151	0.081	0.104				
SDG12	0.836	0.265	0.078	0.256	0.804			
SDG14	0.804	0.204	0.117	0.170	0.843	0.835		
SDG6	0.635	0.072	0.046	0.081	0.503	0.331	0.527	

Source: Authors (2024)

The results of the study in Table 2 demonstrate that the constructs used have high internal consistency and reliability, as indicated by Cronbach's Alpha values exceeding 0.7 and good composite reliability. The AVE values are also relatively high (>0.5), indicating good validity. The results in Table 2 indicate acceptable internal consistency reliability and convergent validity, as all Cronbach's alpha, composite reliability, and AVE values exceeded recommended thresholds. However, the HTMT results in Table 3 reveal that some values slightly exceed the recommended threshold of 0.85, suggesting potential concerns

regarding discriminant validity between certain constructs.

Structural Model Assessment

Following the assessment of the measurement model, the structural model was evaluated using collinearity diagnostics and path analysis. Variance Inflation Factor (VIF) values were examined to assess multicollinearity before testing the hypothesised relationships among the constructs. The structural model is presented in Table 5.

**Table 4: Inner VIF Values**

	VIF
GPM&A -> SDG11	1.025
GPM&A -> SDG12	1.025
GPM&A -> SDG14	1.025
GPM&A -> SDG6	1.025
GR&C -> SDG11	1.937
GR&C -> SDG12	1.937
GR&C -> SDG14	1.937
GR&C -> SDG6	1.937
GR&S -> SDG11	1.561
GR&S -> SDG12	1.561
GR&S -> SDG14	1.561
GR&S -> SDG6	1.561
GT&D -> SDG11	1.758
GT&D -> SDG12	1.758
GT&D -> SDG14	1.758
GT&D -> SDG6	1.758

Source: Authors (2024)

The VIF scores observed in Table 4 indicate that there is no prevalent method bias across all the

constructs, as none of the VIF scores for the inner model exceeded 5, as reported by Oke et al. (2019).

Hypothesis Testing

Table 5: Hypothesis Testing

Path	Original sample (O)	Sample mean (M)	STDEV	T statistics	P values	Hypothesis testing
GPM&A -> SDG11	0.749	0.748	0.081	9.208	0.000	Supported
GPM&A -> SDG12	0.676	0.669	0.071	9.470	0.000	Supported
GPM&A -> SDG14	0.626	0.627	0.073	8.569	0.000	Supported
GPM&A -> SDG6	0.561	0.563	0.086	6.556	0.000	Supported
GR&C -> SDG11	-0.107	-0.104	0.083	1.289	0.197	Not supported
GR&C -> SDG12	-0.137	-0.169	0.080	1.711	0.087	Not supported
GR&C -> SDG14	-0.073	-0.085	0.097	0.746	0.456	Not supported
GR&C -> SDG6	0.052	0.054	0.099	0.519	0.604	Not supported



GR&S -> SDG11	0.087	0.080	0.077	1.137	0.256	Not supported
GR&S -> SDG12	0.056	0.116	0.094	0.592	0.554	Not supported
GR&S -> SDG14	0.046	0.073	0.106	0.437	0.662	Not supported
GR&S -> SDG6	-0.040	-0.052	0.119	0.334	0.738	Not supported
GT&D -> SDG11	0.000	-0.009	0.065	0.001	0.999	Not supported
GT&D -> SDG12	-0.092	-0.120	0.086	1.079	0.281	Not supported
GT&D -> SDG14	-0.052	-0.074	0.103	0.510	0.610	Not supported
GT&D -> SDG6	0.056	0.059	0.088	0.634	0.526	Not supported

Source: Authors (2024)

The results in Table 5 provide insights into hypothesis testing for the relationships between the constructs: green performance management and appraisal (GPM&A), green recruitment and selection (GR&S), green rewards and compensation (GR&C), and green training and development (GT&D) and their contributions to SDGs 6, 11, 12, and 14. It evaluates the hypotheses using path coefficients, sample means, standard deviations, t-statistics, and p-values. The findings reveal that GPM&A has a significant and strong positive relationship with all four SDGs. The path coefficients range from 0.561 to 0.749, with high t-statistics (above the threshold of 1.96) and p-values of 0.000, indicating strong support for all four hypotheses. These results emphasise the critical role of effective green performance management and appraisal practices in driving progress toward sustainable cities (SDG11), responsible consumption (SDG12), life below water (SDG14), and clean water and sanitation (SDG6). The consistency between the original sample and the sample mean further reinforces the reliability of these relationships.

Conversely, GR&C demonstrates negative or negligible relationships with the SDGs, with path coefficients such as -0.107 for SDG11, -0.137 for SDG12, -0.073 for SDG14, and a minor positive

value of 0.052 for SDG6. None of these relationships is statistically significant, as reflected by t-statistics below the critical value and p-values exceeding 0.05. These findings indicate that green reward and compensation practices, as currently implemented in Ghana's hospitality industry, do not have a statistically significant relationship with perceived progress toward SDGs 6, 11, 12, and 14. Similarly, GR&S exhibits weak and statistically insignificant relationships with the SDGs. Although the path coefficients are slightly positive for SDG11 (0.087), SDG12 (0.056), and SDG14 (0.046), and negative for SDG6 (-0.040), their t-statistics and high p-values indicate a lack of support for these hypotheses. The findings indicate that green recruitment and selection do not have a statistically significant relationship with perceived progress toward the SDGs. GT&D, on the other hand, shows no significant relationships with the SDGs, with path coefficients close to zero or slightly negative for SDG11, SDG12, and SDG14, and a small positive coefficient of 0.056 for SDG6. The t-statistics and p-values reinforce the lack of statistical significance, indicating that current green training and development practices are not effective drivers of sustainability outcomes. The findings indicate that green training and development do not have a statistically significant relationship with perceived



progress toward the SDGs. Overall, the findings suggest that, with the exception of green performance management and appraisal, Green HRM practices as currently implemented in Ghana's

hospitality industry do not exhibit statistically significant relationships with perceived progress toward SDGs 6, 11, 12, and 14.

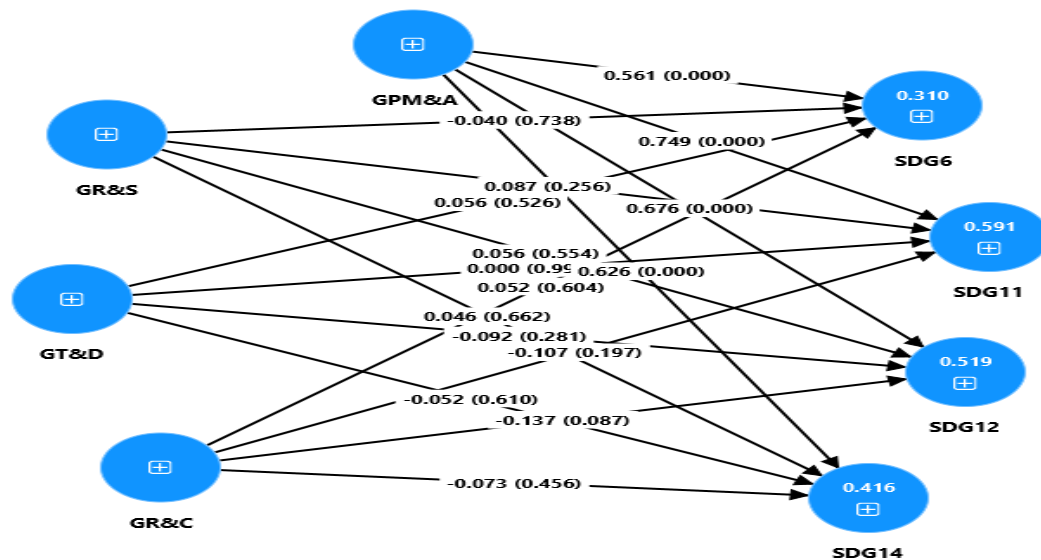


Figure 4: Structural Model Showing the Effect Of GHRM Practices on Progress Towards SDG by the Hospitality Industry.

Challenges and barriers faced by hospitality organizations in implementing GHRM practices and SDGs in Ghana's hospitality sector

Table 6: Challenges and Barriers

Statements	N	Mean	Std. Deviation
Knowledge Gaps			
Management does not prioritize training on green practices and environmental sustainability.	105	3.43	1.307
Staff lacks sufficient knowledge of sustainable practices in this organization.	105	3.41	.948
This establishment does not have access to adequate information on Green Human Resource Management.	105	3.30	1.153
This organization offers workshops or forums for staff to improve environmental behaviour.	105	3.46	1.118
The importance of environmental sustainability is not well communicated within our organization.	105	3.44	1.117



Policy Barrier

Government regulations on waste management are not effectively enforced in the hospitality sector.	105	3.61	1.061
This establishment does not receive incentives or tax benefits for adopting environmentally friendly practices.	105	3.77	1.040
There is a lack of clear government policies promoting sustainable practices in the hospitality industry.	105	3.78	.930
There is insufficient support from local authorities to promote sustainable tourism practices in this area.	105	3.76	.872
Inadequate regulatory support makes it difficult for this organization to implement green practices.	105	3.86	.848

Cultural Barrier

There is resistance from staff to adopt new environmentally friendly methods due to long-standing habits.	105	3.64	1.048
There is a lack of cultural emphasis on environmental conservation within the local community.	105	3.86	.882
Traditional practices in our organization often conflict with the adoption of modern sustainable practices.	105	3.89	.954
Guests are not receptive to changes that promote sustainability, such as reducing water or energy usage during their stay.	105	3.77	.963
The belief that sustainability practices are foreign concepts creates resistance to their implementation in this establishment.	105	3.84	.878

Source: Authors (2024)

The findings in Table 6 highlight several challenges and barriers that hospitality organisations in Ghana face in implementing GHRM practices and achieving SDGs. These challenges are categorised into knowledge gaps, policy barriers, and cultural barriers, with mean scores indicating the perceived severity of each issue and standard deviations reflecting variations in responses. Under knowledge gaps, it is evident that a lack of adequate training and awareness impedes the adoption of green practices. The statement "Management does not prioritise training on green practices and environmental sustainability" has a mean of 3.43, indicating that many organisations do not view training as a critical

priority. Similarly, staff members' insufficient knowledge of sustainable practices, with a mean of 3.41, suggests that the workforce is not adequately equipped to contribute to environmental sustainability. The relatively high mean of 3.46 for workshops or forums intended to improve environmental behaviour indicates a moderate presence of such initiatives, but this is likely insufficient given the broader context of limited organisational knowledge. Furthermore, the insufficient communication of environmental sustainability's importance within organisations (mean of 3.44) suggests a gap in leadership and strategic vision for sustainability.



Policy barriers present the most pronounced challenges, as evidenced by the moderate means across this category. The lack of clear government policies promoting sustainable practices in the hospitality industry (mean of 3.78) and inadequate regulatory support for implementing green practices (mean of 3.86) highlight systemic issues that hinder progress. Additionally, the absence of government incentives, such as tax benefits (mean of 3.77), and weak enforcement of waste management regulations (mean of 3.61) exacerbate the difficulty of adopting environmentally friendly practices. These findings indicate that the hospitality sector operates in a regulatory environment that does not sufficiently encourage or facilitate sustainable development. Cultural barriers also pose significant challenges, as seen in the resistance to change from both staff and guests. The mean score of 3.89 for the conflict between traditional practices and modern sustainable practices highlights how deeply rooted organisational habits and norms can act as obstacles. Similarly, resistance from guests to adopt sustainability-promoting changes, such as reducing water or energy use during their stay (mean of 3.77), underscores the difficulty of aligning customer expectations with environmental goals. The perception that sustainability is a foreign concept (mean of 3.84) and the lack of a cultural emphasis on environmental conservation within the local community (mean of 3.86) further complicate efforts to embed sustainable practices.

DISCUSSION

The study examined hospitality managers' perceptions of the effect of Green Human Resource Management (GHRM) practices on perceived progress toward Sustainable Development Goals (SDGs) 6, 11, 12, and 14 among hospitality establishments located in the coastal communities of Accra. The findings reveal that green performance

management and appraisal (GPM&A) was the only GHRM practice that demonstrated a statistically significant positive relationship with perceived progress toward all four SDGs. In contrast, green recruitment and selection (GR&S), green rewards and compensation (GR&C), and green training and development (GT&D) did not exhibit statistically significant relationships with perceived progress toward the SDGs. The significance of GPM&A suggests that managers perceive performance appraisal systems that incorporate environmental targets and sustainability indicators as important mechanisms for advancing organisational sustainability objectives. This finding is consistent with the Resource-Based View (RBV), which emphasises the strategic value of organisational capabilities, and the Theory of Planned Behaviour (TPB), which suggests that employees are more likely to engage in environmentally responsible behaviours when performance expectations and accountability mechanisms are clearly communicated. The findings also align with Hameed et al. (2020) and Ren et al. (2021), who found that integrating environmental metrics into performance appraisal systems enhances employee commitment to sustainability initiatives.

The absence of statistically significant relationships between GR&S, GR&C, GT&D and perceived progress toward the SDGs requires careful interpretation. Rather than indicating implementation gaps alone, the findings suggest that these practices, as currently measured and implemented within the sampled hospitality establishments, are not significantly associated with managers' perceptions of progress toward SDGs 6, 11, 12, and 14. Several explanations may account for these null findings. First, Green HRM practices in Ghana's hospitality industry may still be at an early stage of development, limiting their effectiveness.



Second, the measures relied on managerial perceptions rather than objective sustainability indicators, which may affect the observed relationships. Third, organisational and cultural factors may weaken the translation of recruitment, training, and reward systems into observable sustainability outcomes. The findings differ from several previous studies that reported significant positive effects of green recruitment, green training, and green reward systems on environmental sustainability and sustainable development outcomes (Mishra, 2017; Liu et al., 2022; Kissi et al., 2024; Ghani et al., 2024). One possible explanation for this divergence is contextual variation. Much of the existing evidence originates from manufacturing, multi-sectoral, or non-Ghanaian contexts, whereas this study focused exclusively on hospitality establishments in Accra. Differences in organisational priorities, resource availability, regulatory pressures, and the maturity of sustainability practices may explain why only GPM&A emerged as significant in the present study.

These findings should be interpreted within the limitations of the study. The analysis was based on responses from 105 hospitality establishments located in Accra and therefore cannot be generalised to the entire hospitality industry in Ghana. In addition, the dependent variable measured managers' perceptions of organisational progress toward SDGs rather than actual SDG achievement. Consequently, the findings reflect managerial assessments of sustainability progress and may not necessarily represent objective sustainability performance. Furthermore, because the data were collected from a single respondent within each establishment using a self-reported questionnaire, the possibility of common method bias cannot be completely ruled out. Despite these limitations, the study provides important implications for research and practice. The findings suggest that hospitality

organisations seeking to enhance perceived progress toward environmental sustainability goals may benefit from strengthening green performance management and appraisal systems.

CONCLUSIONS

This study examined hospitality managers' perceptions of the effect of Green Human Resource Management (GHRM) practices on perceived progress toward SDGs 6, 11, 12, and 14 among hospitality establishments in Accra, Ghana. The findings indicate that green performance management and appraisal was the only GHRM practice that demonstrated a statistically significant positive relationship with perceived progress toward all four SDGs. This suggests that the integration of environmental objectives into employee performance evaluation systems is perceived by managers as an important mechanism for advancing organisational sustainability efforts. In contrast, green recruitment and selection, green rewards and compensation, and green training and development did not exhibit statistically significant relationships with perceived progress toward the SDGs. Therefore, based on the findings of this study, there is insufficient empirical evidence to conclude that these practices are associated with perceived progress toward SDGs 6, 11, 12, and 14 within the sampled hospitality establishments.

Practical Implications

The findings suggest that hospitality establishments seeking to enhance progress toward environmental sustainability goals should pay particular attention to green performance management and appraisal systems. Embedding environmental indicators within performance evaluation processes may strengthen accountability and encourage behaviours that support sustainability objectives. However, given that green recruitment and selection, green rewards and compensation, and



green training and development were not found to be statistically significant predictors of perceived SDG progress, caution should be exercised in assuming their effectiveness within the current context. Additional research is needed before definitive practical recommendations can be made regarding these practices.

Limitations and Suggestions for Further Research

This study was limited to 105 hospitality establishments located within the coastal communities of Accra and relied on managers' perceptions of organisational progress toward SDGs 6, 11, 12, and 14 rather than objective measures of SDG achievement. Consequently, the findings should not be generalised beyond the study context. Future research should investigate why green recruitment and selection, green rewards and compensation, and green training and development did not exhibit significant relationships with perceived progress toward the SDGs. Such studies may explore whether contextual factors, measurement issues, organisational culture, implementation challenges, or industry-specific conditions influence the effectiveness of these practices. Additionally, future studies may examine other Green HRM practices such as employee participation, employee engagement, and green talent management. Researchers are also encouraged to employ mixed-methods approaches, incorporate objective sustainability indicators, and undertake longitudinal studies to provide a deeper understanding of how Green HRM practices influence progress toward the Sustainable Development Goals within Ghana's hospitality industry.

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