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Investigating the role of perceived organisational support in the relationship between human resource skill adjustment and corporate sustainability in the hospitality industry

Friday Ogbu Edeh[1*], Desmond Oben Neji[2], Collins Okechukwu Irem[3], Esther Ugo Alum[4], Vitalii S. Nitsenko[5], Gladys Onah Owere[6], Agnes Ugboego Chukwu[7], Kingsley Sunday Uzoadigonma Oyekezie[8], Chichi Maureen Anyalor[6] and Mary Aluoch Odenyo[9]

*Correspondence:
Friday Ogbu Edeh
friday.edeh@kiu.ac.ug

Full list of author information is available at the end of the article

Abstract
Human resource skill adjustment is a process of upgrading workforce skills to match current realities in the organisation. The essence of upgrading employees' skills is to enhance the sustainability of the organisation. Based on the contingency theory of socialisation and stakeholder theory, this study investigates the role of perceived organisational support in the relationship between human resource skill adjustment and corporate sustainability in the hospitality industry using a cross-sectional survey. Data were gathered from 600 workers of ten (10) three-star hotels in southeastern Nigeria. Result of SMARTPLS structural equation modelling indicate that perceived organisational support moderates the relationship between human resource skill adjustment and corporate sustainability. The research concludes that human resource skill adjustment enhances corporate sustainability of hospitality businesses in south-eastern Nigeria. The result would aid policymakers to formulate and implement policies on human resource skill adjustment in the hospitality industry.

Keywords Human resource, Human resource skill adjustment, Corporate sustainability, Perceived organisational support, Hospitality industry

1 Introduction

The COVID-19 pandemic outbreak disrupted the operations of hospitality businesses around the world. The pandemic resulted in the closure of many hospitality businesses, thereby distorting their sustainability intent, which is one of the major reasons why most businesses are in existence [1]. A survey report by the World Travel & Tourism Council has shown that before the external disruption, the hospitality industry generated about USD 9.2 trillion for the world economy; however, in 2020, the epidemic reduced the revenue of the industry to about USD 4.5 trillion [2]. The above negative effect on the hospitality industry was due to the lockdown measures adopted by many nations aimed at curtailing the spread of the coronavirus [3, 4]. The global negative impact of the pestilence on hospitality industries ranges from massive job losses, decreases in profitability, dislocation of formal structure, skill shortages, and forced redundancy of the workforce [5]. Research has shown that the negative impact of the epidemic would require companies all over the world to reskill 40% of their employees by 2024, while 94% of business managers anticipate their workforce to be upskilled [6]. In addition, the World Economic Forum argued that by 2025, global human resources would need to be upskilled and reskilled to enable them to perform new, technologically driven jobs [7]. Apart from the negative disruption caused by the epidemic on hospitality businesses, the plague also caused a skill shortage in the industry, which prompted many countries to solicit human resource professionals and expert advice on how best to fill the skill gap [8]. Nigeria's hospitality sector was not left out since the pandemic changed the modes of rendering services to prospective customers and this caused serious skill shortages in the industry, thereby prompting the urgency of skill adjustment of the personnel [5, 9, 10]. It was this challenge that prompted [11] to propose a new skill enhancement approach known as 'human resource skill adjustment', which has been verified to have predicted organisational resilience and business dynamic capability [5, 9]. In this study, human resource skill adjustment refers to the process of upskilling and reskilling employees' skills to match with the current actualities in the workplace. In addition, corporate sustainability denotes a business strategy aimed at influencing the environmental, social, and economic effects of an organisation by contributing to the broader economy and society. Prior studies such as [4, 11], and [9] have dissected the human resource skill adjustment variable with other criterion variables, though their approaches differ from that of the current study. The current research focuses on how human resource skill adjustment could predict corporate sustainability in the hospitality industry while observing the moderating role of perceived organisational support, which the previous trend of studies failed to observe.

However, a prior study has shown that sustainability in business is very important because, without it, many businesses would have failed [12]. In agreement with [12] contention, [13] contended that corporate sustainability is the ligament that holds organisational stakeholders whose contributions are usually at stake whenever there is a negative impact on the organisation. In addition, [14] asserts that sustainability is a key factor in enhancing the image of a successful enterprise.This implies that any business that has not embraced sustainability would not stand the test of time [15]. It was the above submission that ignited [16] intention to argue that every business needs to leave a legacy for future generations to benefit in terms of job creation, entrepreneurial orientation, and community development. In line with this argument, [1] stressed that service-oriented businesses that were negatively affected by the contagion need to resuscitate their sustainability dimensions, such as social sustainability and economic sustainability. Thus, to promote sustainable business activities, the hospitality industry has commenced the implementation of energy conservation using electric card systems that reduce the wastage of energy whenever it is not in use [17]. Regarding energy preservation, [19] opined that most hospitality businesses have embraced the use of solar energy over the use of generating sets for power generation. In addition, [4] assert that customers now pay adequate attention to environmental protection when visiting any hospitality industry for a pleasurable outing. Research has shown that the pandemic has made hotel tourists more conscious of the environment than ever [10].

Nonetheless, corporate sustainability can be achieved when human resources are equipped with the necessary sustainability skills for effective performance in their various functional areas. This is the reason why [9] contended that employees in the post-COVID-19 new normal need to be equipped with the recent and required skills needed in the hospitality sector to overcome future interferences. Again, [4] are of the view that the negative effect of the plague dislocations on hospitality businesses requires that human resources that are saddled with the responsibility of ensuring that the organisational goals are transported to the desired destination require new skills for the new normal work environment. [10] stressed that the performance of human resources is largely dependent on the skills they possess. Aligning with the contention above, [11] maintained that human resources that fail to adjust to the new normal have been planned to be evicted from their organisation. In addition, [4] suggested that for hospitality businesses to bounce back from the pandemic, it is very necessary for human resource professionals or human resource managers in the industry to modify the skills of the workforce in line with the current industry trends through upskilling and reskilling. In support of the above argument, [9] contended that upskilling and reskilling methods are the most recent skill adjustment instruments at the disposal of human resource managers who are proactive. Building on this postulation, [17] stated that due to the changes orchestrated by the epidemic, customers have also changed their behaviour, which is something the management of hospitality businesses should also take into consideration for corporate sustainability. Therefore, human resource skill adjustment is an instrument through which the human resource can be well-equipped with new work structures and operations.

This research is significant for its uniqueness in examining the role of perceived organisational support in the relationship between human resource skill adjustment and corporate sustainability in the hospitality sector, while previous studies [4, 9, 11] have investigated human resource skill adjustment with another criterion variable other than corporate sustainability. [11] investigated the effect of organisational learning on human resource skill adjustment in the manufacturing sector, south-eastern Nigeria. [4] investigated the effect of human resource skill adjustment on the dynamic capability of selected four-star hotels in Enugu State, south-eastern Nigeria. [9] investigated the effect of human resource skill adjustment on organizational resilience in the manufacturing sector in Enugu State, south-eastern Nigeria. This research differs from the above mentioned studies because it utilises both contingency theory of socialisation and stakeholder theory as baseline theories to explain the relationship between human resource skill adjustment and corporate sustainability thereby creating a distinct gap amongst prior studies. Secondly, the three studies mentioned did not investigate the relationship between human resource skill adjustment and corporate sustainability. Thirdly, previous studies did not us structural equation modelling in their study. Fourthly, whereas [11] and [9] focused on manufacturing companies, [4] studied four-star hotels which are quite different from this study. Lastly, previous studies did not use moderating variable to examine the relationship of their predictor and criterion variables. Thus, the contribution of this research is the investigation of perceived organisational support as a moderating factor, the use of the contingency theory of socialisation, the utilisation of structural equation modelling to analyse the constructs and three-star hotels where data was collected. Thus, the specific goals of this study are to:

(1) Examine the extent to which upskilling and reskilling relate to corporate sustainability
(2) Measure the moderating role of perceived organisational support in the relationship between human resource skill adjustment and corporate sustainability

The rest sections of the research are the theoretical and conceptual reviews quite apart from hypotheses development and conceptual framework. In the third and fourth section, the study highlighted the methodology and results. In the fifth section, the study discussed the results, implications, and conclusion.

2 Literature review

2.1 Human resource skill adjustment

The theoretical frameworks that best explain this study are [18] the contingency theory of socialisation and [32] stakeholder theory. The contingency theory of socialisation states that there is no one best universal method used for the adjustment of workforce skills and behaviour [9]. The theory further argued that skill adjustment is a function of the business environment and situation that orchestrated the change [4]. What this implies is that human resource skill adjustment can be carried out based on the circumstances the organisation finds itself in, as well as the business environment. Therefore, when implementing changes in human resources skills, professionals must analyse the environment, identify the skill gaps that need to be addressed, and determine how many workers require upskilling and reskilling. On the other hand, corporate sustainability (CS) can be explained by stakeholder theory. Stakeholders represent the actors that have a major interest in the organisation [33]. In addition, [34] perceived stakeholders as individuals who make contributions either directly or indirectly and bear the risk associated with the investment in the formal organisation. Stakeholders' theory assumes that businesses are intended to create value for the stakeholders [3]. Thus, it has been shown that CS demands that every business should contribute to the organisation and society at large [35]. Stakeholders in this regard are employees, customers, host communities, suppliers, and creditors [3].

The concept of human resource skill adjustment (HRSA) gained entrance into contemporary human resource management discourse in 2023 when [11] propounded the concept because of the human resource skill shortage in most organisations after the pandemic. Thereafter, the concept gained acceptance in major indexed journals [4, 9]. Aligning with the above evidence, [20] stressed that the plague had changed the skills used in the hospitality industry and advised human resource professionals to come up with a new skill adjustment methodology that could be used to fill the gap. What, then, is human resource skill adjustment? [11] elucidated that human resource skill adjustment covers the process of upgrading workforce skills to match the current realities obtainable in the workplace. [9] stated that the adjustment of human resource skills that would fit the post-pandemic work economy can be accomplished through upskilling and reskilling. Meanwhile, [11] highlighted the benefit of upskilling and reskilling human resources to include job satisfaction, affective commitment, and an increase in sales, creativity, and innovation. The prior survey had shown that because of the skill shortage in the hospitality industry, managers ought to resort to adjusting employees' skills to avoid high skill turnover in the sector [21]. This may have triggered [22] to affirm that the sustainability of every business in the post-epidemic work culture would depend on the skill enhancement of their workforce.

From the foregoing, skill enhancement in the post-epidemic period has been applauded by human resource professionals and policymakers in business-related organisations around the world. This applause is because workers in the hospitality sector have suffered from the shocks orchestrated by the pandemic; hence, for them to regain their place in the industry, a subsequent skill upgrade is required [20, 22]. This is the reason why [20] advised that managers who are saddled with the responsibility of skill upgrading in the hospitality industry should, as a matter of urgency, put in place the mechanism to bridge the skill shortage that was caused by the plague. In the same manner, the authors of [9] were of the view that skill adjustment in the service sector should be the responsibility of human resource managers or talent development experts in the hospitality sector. Meanwhile, [20] suggested that the challenges of the pandemic on the hospitality sector are huge, especially in skills; hence, the authors encouraged hospitality experts and practitioners to deploy upskilling and reskilling to ameliorate the shortage of skills in the industry. It was further advised that organisational stakeholders in the hospitality sector should be ready and willing to make necessary adjustments regarding the skills used for customer service delivery [23]. Perhaps this may be the essence of why [24] advocated that, based on the disruption; the hospitality industry needs to carry out a serious skill enhancement overhaul to enable the industry to meet the levels of other sectors.

Nonetheless, recent research has validated reliable and valid measures of human resource skill adjustment to include upskilling (US) and reskilling (RS) [11]. Upskilling refers to skill upgrades or improvements that would enable an employee (human resource) to perform better in their current job [4]. [7] stressed that upskilling is a skill enhancement process that focuses on the expansion of human resources' skills to empower them to be more effective and productive toward organisational goals. Upskilling also involves continuous learning, which is essential for human resource career development [7]. [24] added that upskilling is the process of teaching employees new competencies that are required in the hospitality industry. [25] affirmed that for an organisation to outperform its competitors, the skill of human resources requires a constant upgrade to avoid redundancy. Upskilling has been acknowledged as an instrument for retaining human resources in the hospitality industry [26]. [27] added that the major reasons for upskilling are to equip human resources with the latest skills that are needed for service delivery in the hospitality industry. Examples of upskilling in the hospitality industry include sanitation and housekeeping, leadership, use of digital room keys, use of social media platforms for advertisement, resilience, critical thinking, home service delivery, food delivery apps, emotional intelligence, and customer relationship skills [28]. On the other hand, reskilling is the process of acquiring a fresh skill that would enable the employee to perform effectively in another job that is different from the one they were performing earlier [11]. [7] contended that reskilling is concerned with the equipping of human resources or employees with the latest skills that will encourage them to occupy new job positions in the same organisation that are different from the ones they occupied before. [27] stated that the survival of the hospitality business after the pandemic would be dependent on the reskilling of human resources in the industry. [20] suggested that reskilling human resources is vital for the sustainability of hospitality businesses. An example of reskilling is a flexible working schedule or remote work. [29] further encouraged human resource managers and experts to embrace reskilling to mitigate the disruptions caused by the pandemic. It was based on these contentions that [30] suggested that instead of recruiting new employees, hospitality practitioners should reskill their existing human resources to save costs and prepare for the post-pandemic new work culture. Survey reports have shown that reskilling and upskilling are crucial to retaining human resources in the organisation, which leads to the attainment of corporate sustainability [31].

Regarding prior empirical investigations on human resource skill adjustment, there is very little research in the literature that has examined its effect on other criterion variables. [11] investigated the effect of organisational learning on human resource skill adjustment in the manufacturing sector in the southeast region of Nigeria using a cross-sectional research design and found that organisational learning predicted human resource skill adjustment. The results of their research demonstrated that organisational learning increases human resource skill adjustment with respect to the post-pandemic work economy. On the one hand, [9] examined the effect of human resource skill adjustment on the dynamic capability of hospitality firms in the new normal using a cross-sectional research design and discovered that HRSA has a significant positive effect on the dynamic capability of the hospitality industry. On the other hand, [4] examined the effect of human resource skill adjustment on corporate resilience in a crisis business environment with a specific focus on the manufacturing sector. Their result revealed that human resource skill adjustment has a significant positive effect on corporate resilience. The abovementioned studies did not investigate the predictability of corporate sustainability through human resource skill adjustment. This is the basis through which the current study was carried out, indicating its uniqueness and originality.

2.2 Corporate sustainability

Corporate sustainability (CS) is a management policy that is aimed at sustaining profitability while considering the impacts such a policy would have on the environment and social and financial resources [1]. Business scholars perceived it as the culture of an established venture to minimise the negative impact on their geographical location [36]. Advancing further, [37] contended that the issue of corporate sustainability is far more than environmentally focused business activities; rather, it is about how businesses are responsible in society. Considering the above, other scholars perceived corporate sustainability as meeting the needs of an enterprise without compromising its capacity to meet the needs of future stakeholders [19, 38]. It also refers to a business strategy designed to shape the environmental, social, and economic impacts of an enterprise by contributing to the economy and society at large [39]. [40] pointed out that a sustainable business places value on its stakeholders, especially the employees, stockholders, and the host community. In another study, [38] asserts that responsible business ensures that the stakeholders are consulted in decision-making processes to avoid negative influences that may oppose the smooth running of the organisation.

Fostering the relevance of sustainability in business, [14] contended that in the post-epidemic work environment, business owners and managers must have learnt huge lessons from the pandemic, hence justifying the need for a sustainable culture. It is against the above submission that [13] posited that corporate sustainability, which focuses on economic sustainability and social sustainability, has a great advantage in terms of corporate citizenship behaviour, corporate reputation, and societal development. However, prior studies had validated corporate sustainability dimensions to include economic sustainability and social sustainability (SS) [1]. Economic sustainability (ES) is concerned with making a profit for organisational stakeholders without misappropriating financial and material resources to avoid a negative effect on society [38, 41]. [1] highlighted that the only way an organisation can achieve economic sustainability is through investments in corporate social responsibility, renewable energy, and the preservation of resources. Economic sustainability implies that organisations need to create products or services that customers want at an affordable cost [42]. Again, [43] simplified the meaning by affirming that economic sustainability refers to when an organisation efficiently utilises its resources to achieve the goals of the organisation. SS is concerned with social matters, including employee well-being, conditions of service, equality, work–life balance, and the community [44].

2.3 Perceived organisational support

Perceived organisational support (POS) is a shared belief held by employees that their management values or regards their job and shows concern about their well-being. [45, 46]. POS can also be an assumption that top management should make resources available to employees to enable them to achieve the overall objectives of the organisation [47]. [48] argued that POS is any action that is expected to be taken by top managers that is targeted at supporting the work of the subordinates. [49] contended that some of the actions that employees consider relevant, as to what management should provide support for, are training, prompt payment of salaries, and other resources for the provision of goods and services. In this study, human resource skill adjustment is assumed to be implemented by the top management. Thus, to sharpen the skills of the employees, managers, or the head of human resources in the organisation are expected to drive the skilling of the workforce. This is because reskilling and upskilling of employee skills can be effective when the management provides opportunities for the employees. From the above contention, [50, 51] admitted that POS has improved the engagement of employees in the formal workplace. It was found that POS enhances firm sustainability, employee commitment, employee retention, and well-being [46]. Prior studies have demonstrated the significance of POS in revitalising ailing enterprises, especially the service enterprises [52]. [48] recommends that managers of service-based organisations should reskill and upskill their workforce through the provision of adequate resources for them to remain sustainable.

2.4 Upskilling and economic sustainability

In the post-pandemic work setting, managers and organisational leaders need to upskill their human resources to attain economic sustainability. The changes that took place after the COVID-19 pandemic, especially in the field of technology, need to be embraced by members of the organisation. Thus, for these changes to translate into meaningful results in the hospitality industry, human resource managers need to update their workforce with the recent skills that are needed for service delivery [5]. For instance, [53] postulated that there are still some customers who are afraid of being infected with the pestilence, especially when they visit business places that are populated with humans. Such customers may want to distance themselves from other customers; hence, it behooves the managers to upskill their employees on how to best provide quality services to such individuals or customers. However, upskilling focuses mainly on assisting human resources with recent skills in the industry that would enable them to function effectively to achieve economic sustainability [54]. To further attain economic sustainability, managers need to upskill their employees in recycling, waste management, and other green initiatives that are capable of engendering economic sustainability. [55] are of the view that economic sustainability can be successfully achieved in the workplace if leaders are willing to upskill their workforce. It has been revealed that skill enhancement of hospitality personnel regarding sustainable profit-making would enhance business strategies that are meant to protect the business environment [56]. [39] added that economic sustainability is associated with resource conservation, and for it to be a reality, employees need to be equipped with the right skills. Furthermore, customer experience during the pandemic cannot be equal to that in the post-epidemic work setting. Therefore, upskilling human resources are essential for responsive customer service to be rendered. Based on the above literature, upskilling equips hospitality employees with contemporary competencies required for efficient service delivery, environmentally conscious operations, and profitability. This alignment with economic sustainability goals supports the following hypothesis:

H1 Upskilling is related to economic sustainability.

2.5 Reskilling and social sustainability

Reskilling is perceived in the literature as a new model of training that focuses on skill adjustment targeted at empowering an employee to take over new job responsibilities in the same organisation [11]. Reskilling enhances the social sustainability of hospitality businesses in the sense that the impact of the COVID-19 plague needs to be identified and addressed to avoid high job turnover. Such impacts, if identified, would assist the hospitality industry to retain its human resources by providing them with the right skills that would enhance their careers [23]. Thus, social sustainability is more focused on providing good conditions to stakeholders such as the employees, shareholders, and the host communities; hence, reskilling is an instrument for improving the well-being of all the stakeholders [57]. The effect of the pandemic has paved the way for managers to reskill their employees on how to take good care of their health. In addition, [58] asserts that it is essential for organisations to initiate social sustainability that would have a positive impact on the host communities through the provision of free healthcare to every individual in the community. Research has suggested that since businesses do not exist in isolation, their existence is made possible by stakeholders such as customers, employees, and the host communities; hence, management should involve them when making decisions that would affect them [59]. This is the basis through which [60] argues that human resources that are responsible for providing quality services to customers must be reskilled to be effective in the discharge of their duties, especially in the post-pandemic work atmosphere. Supporting the abovementioned argument, [24] highlighted that the issues of reskilling have become necessary in the hospitality industry due to the constant technological changes in the sector. [30] aligned with the above contention and posited that changes orchestrated by the epidemic have required the adjustment of human resources skills in the service sector, especially the hospitality industry. In addition, [54] contended that RSK human resources would enhance their skills to effectively discharge their roles in line with the social sustainability policies in the workplace. Based on the contentions above, the second research hypothesis is hereby formulated.

H2 Reskilling is related to social sustainability.

2.6 Moderating role of perceived organisational support on human resource skill adjustment and corporate sustainability

This section showcases the moderating role of perceived organisational support (POS) in the relationship between predictor and criterion variables. Previous studies reviewed in this section had shown that perceived organisational support (POS) had moderated many organisational variables. [16] results show that POS has a positive moderating role on the association between job crafting and job satisfaction of nurses in Jordan. [45] in their study discovered that POS has moderated the relationship between training practices and employee engagement minimally at the commercial banks in Nepal. The investigation result of [46] revealed that POS moderates the relationship between digital business transformation and business resilience in the Nigerian hospitality industry. [61] found that POS moderated the influence of empowering leadership on innovative work behaviours at Tehran Vocational firms. [52] findings revealed that POS moderates the association between inclusive leadership and presenteeism. In addition, the result of [50] revealed that POS moderates the correlation between occupational stress and employee engagement in Kenya.

H3 Perceived organisational support moderates the relationship between human resource skill adjustment and corporate sustainability

2.7 Conceptual framework

Figure 1 below shows the conceptual framework that explains the role of perceived organizational support in the relationship between human resource skill adjustment and corporate sustainability in the hospitality industry. *H1* indicate the relationship between upskilling and economic sustainability. *H2* indicate the relationship between reskilling and social sustainability while *H3* indicate the moderating role of perceived organizational support in the relationship between human resource skill adjustment and corporate sustainability.

3 Materials and methods

3.1 Participants and sampling

This research employed a cross-sectional survey research design that supports the positivist research philosophy, which is anchored on the use of a questionnaire for data collection within a short period [62, 63]. On the other hand, the target population comprises three-star hotels operating within Enugu State in the southeastern region of Nigeria. Specifically, there are twenty-five three-star hotels that are registered with the Ministry of Commerce and Tourism, Enugu, in the southeast of Nigeria. However, since

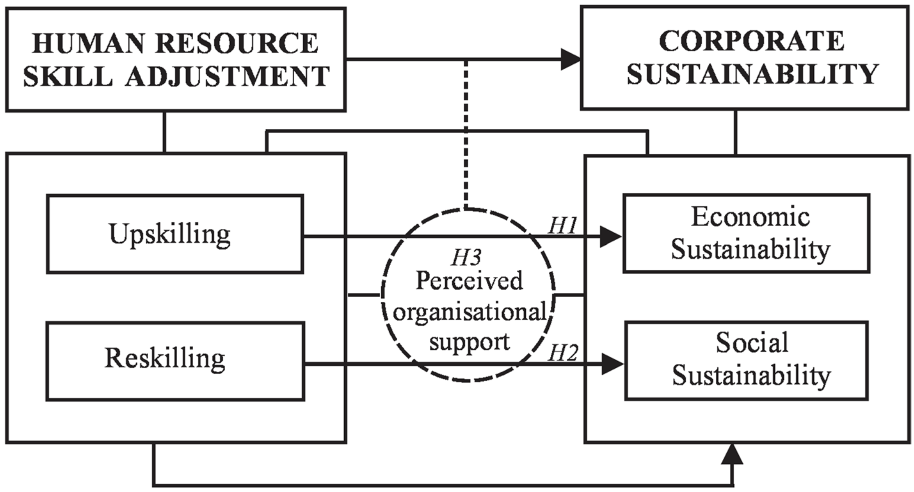

Fig. 1 Research conceptual framework

studying the entire population may seem overambitious and very difficult to do, this study purposively studied ten (10) of the hotels, leading to a total population of six hundred (600) staff from this accessible sample. The choice of the specific selected three-star hotels was informed because of their accessibility to the researchers and their characteristics, such as longevity, which also goes to imply that their staff are most likely to have good knowledge of corporate sustainability. The method described by [64] was used to determine the sample size of two hundred and thirty-four (234) from the overall population. The method of data collection used in this research is a self-administered questionnaire. [62] claimed that data collected with self-administered questionnaires are more current, relevant, and reliable compared to existing data.

3.2 Ethical consideration

Ethical research consideration regarding human participants was observed. Authors who reside in Nigeria were saddled with the responsibility of data collection. The authors informed the respondents that their participation in the study would not harm them and that their personal information, as well as that of their organisation, would not be reported in the study. The informed consent gave the participants confidence and assurance that their personal information would not be published. Having obtained consent from the participants, researchers further informed the participants that the main objective of the research is to determine the effect of human resource skill adjustment on corporate sustainability in the hospitality sector. It was after a detailed clarification that the respondents agreed to participate in the research and instructed the authors to come back and retrieve the questionnaire within one month. Thereafter, the authors administered two hundred and thirty-four (234) instruments to the participants in their various hotel locations. The authors retrieved the questionnaire and discovered that only two hundred and twenty-six (226) questionnaires (96.6% completion) were filled correctly, while eight (8) copies (3.4%) were filled incorrectly. It was the copies that were correctly filled that were used for analysis.

3.3 Data analysis

Partial Least Squares-Structural Equation Modelling (PLS-SEM) analyses was conducted through SmartPLS v 4.1, which involves the analyses of the outer model indices (validity and reliability) in line with the recommendations of [65]. Convergent validity was analysed via factor loadings and average variance extracted, discriminant validity was ascertained with the criterion of Fornell-Lacker and HTMT, while the reliability was assessed through the measures of composite reliability and Cronbach's alpha [66, 67]. On the other hand, the analyses for the participants' demographic characteristics were conducted with frequency distribution with the aid of Statistical Package for the Social Sciences version 25.0.

3.4 Measures and procedure

In terms of variable measurement, authors were guided by the rule of thumb governing the adoption of the already developed instrument, which states that to avoid repetition of results in the valid instrument already developed, researchers should adopt and change the wordings, if needed, to fit into the environment where it would be used to collect data and ensure that the sources are properly cited [68]. It is based on the above affirmation that the researchers adopted a validated and reliable Human Resource Skill Adjustment Instrument (HRSAI) developed by [11], containing upskilling (6-item) and reskilling (6-item), and confirmed by [4] and [9]. [1] validated Corporate Sustainability Instrument containing economic sustainability (4 items) and social sustainability (6 items) was adapted, while [69] validated POS (4 items) was also adapted. The indicators were measured on a five-point Likert scale ranging from 5 = strongly agree, 4 = agree, 3 = disagree, 2 = strongly disagree, and 1 = neither agree nor disagree.

4 Results

The gender distribution of the participants in Table 1 revealed that 108 respondents, representing 47.8%, are females, while 118 of the participants, representing 52.2%, are males. The result of the participants' age shows that 21 respondents, representing 9.3%, are within the age of 18–26 years; 81 participants, representing 35.8%, are aged 27–35 years; 106 respondents, representing 46.9%, are within the age of 36–44 years;

Table 1 Participants' profile

Demographic variables	Frequency	Percent (%)
Gender		
Female	108	47.8
Male	118	52.2
Age (years)		
18–26	21	9.3
27–35	81	35.8
36–44	106	46.9
45 and above	18	8.0
Work Experience (years)		
1–10	173	76.5
11 and above	53	23.5
Education		
Secondary	46	20.4
Tertiary	161	71.2
Others	19	8.4

and 18 respondents, representing 8.0%, are aged 45 or above. Participants' working experience indicated that 173 respondents, representing 76.5%, have a working experience of 1–19 years, while 53 respondents, representing 23.5%, have a working experience of 11 years and above. The educational attainment results indicated that 19 participants attended other forms of education, while 36 respondents, representing 20.4%, attended secondary education, and 161 participants, representing 71.2%, attended tertiary institutions.

4.1 Preliminary check (data quality)

4.1.1 Common method bias (CMB)

The inner VIF data were assessed to see if there was any common method bias. All values were below the 3.3 threshold, which meant that collinearity wasn't an issue and common method variance didn't put the results at risk (Kock, 2015; Podsakoff et al., 2003). This shows that the data is devoid of major bias and can be used for more study.

4.1.2 Social desirability bias

Procedural remedies was utilised to mitigate social desirability bias. Respondent anonymity and confidentiality were guaranteed, neutral language was employed, and surveys were self-administered. These steps follow the best practice guidelines (Fisher, 1993; Podsakoff et al., 2012; Nederhof, 1985). The lack of irregular response patterns further corroborates that social desirability bias is not an issue in this dataset.

4.2 Outer model evaluation

Table 2 shows the factor loadings, AVE, composite reliability, and convergent validity of the study. As stated by [70] for convergent validity, the factor loadings must reach 0.70 and above while AVE value must reach 0.5 and above. As shown, the values of factor loadings were between 0.70 and 0.88 indicating that the items are valid and reliable [71]. Average Variance Extracted (AVE) values exceeded the minimum mark with the least being 0.66, further confirming convergent validity [72]. For reliability, composite reliabilities values were above 0.70 and Cronbach alpha values were also above 0.70, both implying good internal consistency within each variable [72].

The result in Table 3 shows the discriminant validity with values indicating that the items for each indicator are valid. According to [73] to ascertain discriminant validity, the square root of each construct's AVE should exceed its correlations with other constructs. As shown using the Fornell–Larcker Criterion, the diagonal values (i.e., the square roots of AVEs) exceed the off-diagonal correlations. This implies that the constructs are distinct, confirming discriminant validity [73].

Table 2 Factor Loadings, AVE, Composite Reliability, and Convergent Validity.
Source SmartPLS4.1 Output of Research Data, 2025

Construct	No. of Items	Range of Factor Loadings	Average Variance Extracted (AVE)	Composite Reliability (CR)	Cronbach's Alpha
Upskilling	6	0.72–0.87	0.692	0.93	0.91
Reskilling	6	0.70–0.85	0.754	0.95	0.94
Economic Sustainability	4	0.75–0.88	0.600	0.86	0.79
Social Sustainability	6	0.70–0.86	0.781	0.96	0.95
POS	4	0.73–0.87	0.784	0.94	0.91

Table 3 Discriminant Validity—Fornell–Larcker Criterion. *Source* SmartPLS4.1 Output of Research Data, 2025

	ES	POS	RS	SS	US
ES	0.775				
POS	0.496	0.885			
RS	0.765	0.525	0.868		
SS	0.606	0.275	0.565	0.884	
US	0.730	0.329	0.800	0.534	0.832

Table 4 Discriminant Validity—Heterotrait–Monotrait Ratio of Correlations (HTMT). *Source* SmartPLS4.1 Output of Research Data, 2025

	ES	POS	RS	SS	US
POS	0.547				
RS	0.846	0.568			
SS	0.728	0.314	0.598		
US	0.845	0.351	0.893	0.538	
POS x HRSA	0.101	0.163	0.246	0.104	0.374

Table 4 shows the results of discriminant validity—heterotrait–monotrait ratio of correlations (HTMT) To enhance the establishment of discriminant validity, given that the Fornell-Lacker criterion has been demonstrated to be inadequate for evaluating discriminant validity in isolation (Henseler et al., 2015), we further employed the Heterotrait–Monotrait ratio of correlations (HTMT), as illustrated in Table 4. The table shows that the HTMT ratio gives more proof that discriminant validity is true. According to the widely accepted thresholds of 0.85 as a tighter criterion and 0.90 as a more lenient cut-off (Franke & Sarstedt, 2019), the results indicate that all the HTMT ratios are below 0.90. The highest HTMT value seen was between RS and US (0.893), which is still within the permissible liberal range. Other connections, including POS and RS (0.568), POS and SS (0.314), and POS × HRSA and ES (0.101), are much weaker, which further proves that discriminant validity is true.

4.3 Inner model evaluation

Figure 2 and Table 5 shows the structural statistics of the research hypotheses of the study. The findings are guided by the recommendations of [70, 73] that the *p*-values must be less than 0.05 at the 5% level (95% confidence) and t-values greater than 1.96 at the 5% level in a two-tailed test as obtained in this study. H1 result revealed that upskilling has significant positive relationship with economic sustainability, this finding was informed by the *p*-value of 0.000 and t-value of 10.207 both of which exceed their respective thresholds. H2 result revealed that reskilling efforts positively and significantly relate with social sustainability, with p-value of 0.001 and t-value of 3.439. Lastly, H3 result revealed that perceived organisational support moderates the relationship between human resource skill adjustment (HRSA) and corporate sustainability (CS), with p-value of 0.011 and t-value of 2.543.

Table 6 displays the result of predictive relevance and adjusted r-squared. R^2 and modified R^2 are two ways to assess predictive accuracy. They show how much of the variance in the dependent variable is explained by the independent variables. This shows how well the model explains and predicts (Chin, 2010). The predictive accuracy results show that the exogenous construct of upskilling (US) explained 53.5% of the variance

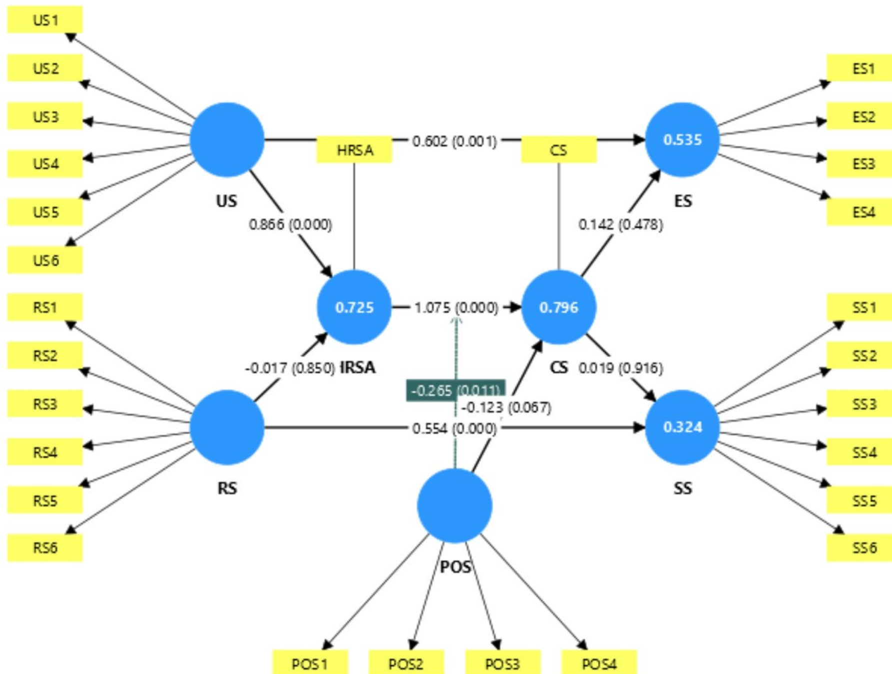

Fig. 2 Hypotheses 1, 2 and 3

Table 5 Hypothesis 1, 2, and 3.
Source SmartPLS4.1 Output of Research Data, 2025

Hypotheses	Relationships	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Finding
H1	US—> ES	0.734	0.733	0.072	10.207	0.000	Positive and Significant
H2	RS—> SS	0.554	0.557	0.161	3.439	0.001	Positive and Significant
H3	POS x HRSA—> CS	−0.265	−0.246	0.104	2.543	0.011	Positive and Significant

Table 6 Results of Predictive Accuracy (R^2 and Adjusted R^2).
Source SmartPLS4.1 Output of Research Data, 2025

Exogenous Variables	Endogenous Variables	Predictive Accuracy (R^2)	Adjusted R^2
US	ES	0.535	0.523
RS	SS	0.324	0.318

for economic sustainability (ES) (R^2 = 0.535; Adjusted R^2 = 0.523), which means it had a lot of explanatory power. The exogenous construct of reskilling (RS) explained 32.4% of the variance for social sustainability (SS) (R^2 = 0.324; Adjusted R^2 = 0.318), which means it had a moderate amount of explanatory power. These results suggest that upskilling is a more significant factor influencing economic sustainability than the impact of reskilling on social sustainability, while both associations hold significance. The fact that R^2 and adjusted R^2 values are so close to each other is more proof that the model is well-defined and not overfitted.

Table 7 Effect Size of the exogenous variables on the endogenous variables.
Source SmartPLS4.1 Output of Research Data, 2025

Endogenous Variable	Exogenous Variable	R-Squared Included	R-Squared Excluded	f^2- effect size	Remark on Effect Size
ES	US	0.535	0.402	0.286	Medium-Larg
	RS	0.535	0.196	0.189	Medium
SS	US	0.324	0.305	0.028	Small
	RS	0.324	0.317	0.010	Very Small

Table 7 shows the result of effect size of the exogenous variables on the endogenous variables. The effect size (f^2) quantifies the magnitude of the influence exerted by each exogenous variable on its respective endogenous construct, reflecting the extent to which the predictor accounts for the variance in the outcome (Cohen, 1988). According to Table 7, the results show that the predictors have distinct effects on the endogenous variables. Upskilling (US) had a medium-to-large influence ($f^2=0.286$) on economic sustainability (ES), which means that upskilling (US) greatly increases the explained variance in economic sustainability (ES). Similarly, reskilling (RS) had a medium effect ($f^2=0.189$) on ES, indicating a considerable but comparatively lesser contribution relative to upskilling (US). Conversely, regarding social sustainability (SS), both predictors exhibited little effects. US had a tiny influence ($f^2=0.028$), while reskilling (RS) displayed a very minor effect ($f^2=0.010$), showing that both variables contribute only minimally to explaining the variance in social sustainability (SS). Overall, the findings indicate that while both upskilling and reskilling play essential roles in determining sustainability outcomes, upskilling exerts a stronger and more practically relevant influence, notably in boosting economic sustainability. The results also illustrate that the influence of learning methodologies may differ depending on the individual facet of sustainability being studied.

5 Discussion

The major finding of the study revealed that perceived organisational support moderates the relationship between human resource skill adjustment and corporate sustainability in three-star hotels, south-eastern Nigeria. The results further demonstrated that in the hospitality industry, human resource managers and professionals can leverage on human resource skill adjustment (upskilling and reskilling) to enhance their sustainability capacity to meet the needs of the stakeholders. This finding is in line with [31]'s affirmation that service organisations need to equip their workforce by upskilling and reskilling nomenclature if they want to remain relevant in business. The results [21] also show that when an organisation invests in its human resources, it becomes more efficient, effective, resilient, and dynamic, which makes it sustainable. [22] found that the utilization of upskilling has a direct effect on commitment and career advancement. Specifically, the result of hypothesis one revealed that upskilling has a significant relationship with economic sustainability. This implies that upgrading the skill of workers after the pandemic to match the realities on the ground is paramount to achieving the economic sustainability of the hospitality industry. This is the basis through which [25] highlighted that upskilling is considerably easier and more effective to implement in the hospitality industry compared to traditional training methods that require a longer period to organize. [24] also acknowledged that human resource experts in the hospitality industry need to take advantage of upskilling because it is cost-effective. The result corroborated with those of [4], whose findings revealed that upskilling predicted situation awareness in the manufacturing industry. [4] evidence differs from that of this study based on the industry of investigation. Although very similar in methodology and instrument regarding human resource skill adjustment, such studies still failed to predict corporate sustainability with human resource skill adjustment, which makes the current study unique and original. The finding of hypothesis one is also in line with [9] whose result indicated that upskilling has significant relationship with sensing capability in the hospitality sector. However, the present result may vary to some extent from the previous trends of thought in terms of the participants involved. The participants in this research are mostly graduates, which indicates that they understand the need to be upskilled to avoid being alienated from the labour market. Again, [20] was of the view that workforce effectiveness is a function of management's readiness to modify the skills of its workforce to fit into the new work environment.

The finding of hypothesis two revealed that reskilling is related to social sustainability. This result corroborated with [22] findings which indicates that after the pandemic, managers who adopted reskilling have admitted that it has yielded excellent and productive employees. Additionally, the result of [9] corroborates with the second hypothesis results. Their findings revealed that reskilling has a significant positive effect on reconfiguration capability of hospitality businesses in south-eastern Nigeria. The difference between [9] and the present study is that the former collected its data from four-star hotels, while this research collected data from three-star hotels. Based on the review of the literature, it was shown that reskilling empowers employees to adapt to changing work roles, which enhances social sustainability. Supporting the abovementioned results, the contingency theory of socialization affirmed that the adjustment of human resource skills is positively associated with the environment in which the business is situated [11, 13]. Again, the result of hypothesis two further confirmed that human resource experts and professionals can restore the skill shortage in the hospitality industry through the adoption of the reskilling approach. The positivity of these results affirmed the potential of human resource skill adjustment in alleviating skill obsolescence in the new normal. However, the results of this study were not opposed to those of the previous empirical investigation, but it is assumed that the upcoming investigations may differ from the current results. This has further shown that human resource skill adjustment is still an emerging concept in the human resource management field of study.

The result of hypothesis three revealed that perceived organisational support (POS) moderated the relationship between human resource skill adjustment and corporate sustainability significantly and positively. This finding is in consonant with contingency theory of socialization which demonstrates that firms need to adopt the skill adjustment approach that fit the situation and environment in which they operate. Thus, POS may or may not be provided in the workplace but the management would always improvise alternatives for corporate sustainability. The result of hypothesis three corresponds with the findings of [45, 46, 61] and [52]. Most of these studies did not examine how POS can moderate the effect of human resource skill adjustment on corporate sustainability. However, the moderating result suggests that the perception of management providing support to achieve corporate sustainability implies that human resource skills can also be adjusted to fit the new work culture in the hospitality industry.

6 Research implications

Drawing from the findings, the study outlined specific implications by filling the research gaps of previous studies.

6.1 Theoretical implications

The contingency theory denotes the necessity behind the flexible nature of HR skills to accommodate shifting situations, whereas the stakeholder theory highlights the necessity to coordinate the adjustments with the needs of varied stakeholders that intensify the moderating role of perceived organizational help by enhancing that the market association of skill development is strategically occupied and socially valid in the hospitality sector as a stronger catalyst of corporate sustainability. Secondly, hospitality practitioners would be enlightened on the benefits of adjusting the skills of their workforce, which would enhance the sustainability of all the functional areas of operations to match the current realities in the industry. Thirdly, hospitality and tourism-based researchers who are interested in carrying out further investigations on human resource skill adjustment can be guided by the dimensions used in this study to predict criterion enterprise variables other than corporate sustainability, especially as concerns the hospitality industry. Fourthly, the results offer empirical evidence for the relationship between HR skill adaptation and corporate sustainability, therefore supporting arguments on how investments in human capital influence more general organisational results. Lastly, this study expands current models to demonstrate that the efficacy of HR activities is context-dependent by the inclusion of perceived organisational support as a moderator. Based on this, future studies can investigate other mediators or contingency factors.

6.2 Practical implications

Drawing from the findings of this research, hospitality business practitioners and managers should constantly adjust the skills of their human resources with the latest technological changes that are in vogue, as this would encourage retention and discourage tourist withdrawal. Moreover, the board of directors or owners of hospitality businesses in southeastern Nigeria should make adequate funds available to be used to source human resource skill adjustment experts or professionals who are well-equipped with upskilling and reskilling methodologies to avoid being alienated from the intensely competitive hospitality industry. In addition, to support sustainable performance, hospitality businesses need to set aside funds for both reskilling and upskilling of their staff to enhance performance and sustainability. This can be done through customised training courses that would help to close skill gaps and increase social and economic sustainability. Again, an organisational culture should clearly encourage staff growth. To raise morale and performance, this might involve open communication, learning reward systems, and buy-in of leaders. Integration of skill development with strategic sustainability goals by HR departments will help to build a more competitive and resilient company over time.

6.3 Limitations and future research directions

The major limitations of this study include its geographical scope, insufficient research on human resource skill adjustment, the use of a cross-sectional survey design, and the chosen method of analysis. However, for these gaps to be filled, the authors recommend that more empirical investigations on human resource skill adjustment should be carried out in different industries, countries, and methodologies that differ from this research before generalisations can be made. Future studies should also examine human resource skill adjustment with other dependent variables, quite apart from the introduction of a mediating variable. One other limitation of this study is the use of one method of data collection, which is the questionnaire. The study encourages subsequent investigations to make use of the interview guide and questionnaire to find out if there could be variation in the current research. In addition, subsequent investigations should employ longitudinal surveys and other moderating variables to identify gaps in the present research.

7 Conclusion

This study was aimed at investigating the role of perceived organizational support in the relationship between human resource skill adjustments in the hospitality industry. To achieve the main objective, the study outlined three specific objectives which are (1) to investigate the relationship between upskilling and economic sustainability, (2) to examine the relationship between reskilling and social sustainability, and (3) to investigate the moderating role of perceived organisational support in the relationship between human resource skill adjustment and corporate sustainability. After, analyzing the data, the study found that POS moderated the relationship between human resource skill adjustment and corporate sustainability in selected three-star hotels in southeastern Nigeria. Based on the findings, this study concludes that human resource skill adjustment measured through upskilling and reskilling enhances corporate sustainability, which is assessed via economic and social sustainability in the hospitality industry. The finding of this study demonstrates that an investment by the management of three-star hotels in upskilling and reskilling results in an increase in corporate sustainability. For specific objective one, it was found that upskilling predicted economic sustainability, which indicated that an improvement in the skills of human resources automatically affects economic sustainability positively. The study conclude based on objective one that as hotels add funds for upskilling their employees, economic sustainability will increase. This will lead to improvement in service innovation, higher performance, efficiency, and effectiveness in delivering quality services to customers. In the context of the hospitality industry, upskilling focuses on energy conservation skills, responsible waste management skills, and recycling skills.

Secondly, objective two results revealed that reskilling has a significant positive relationship with social sustainability in selected hotels in south-eastern Nigeria. The study hereby concludes that when employees are encouraged to acquire new skills that would equip them for new roles, social sustainability is likely to be improved. Such an outcome will translate to an increase in stakeholder relationships, reputation, employee engagement, and customer satisfaction. In practice, the study indicates that improvement in reskilling would perhaps improve the social sustainability of the hospitality industry. Reskilling would probably enable human resources to carry out their job responsibilities efficiently regarding the efficient utilisation of resources. Thirdly, regarding the moderating role of perceived organisational support, it was found that POS moderated the relationship between human resource skill adjustment and corporate sustainability. What this finding suggests is that when management provides sufficient support such as funds and other relevant material resources for the upskilling and reskilling of employees, the corporate sustainability would always be enhanced. This implies that management's support facilitates the HR skill adjustment of the hotels under study, making it a sustainable venture.

Drawing from the contingency theory of socialisation employed in the study which asserts that there is no universally optimal approach to human resource skill adjustment; an effective strategy is dependent on external variables. The research enhances understanding by demonstrating that ongoing upskilling and reskilling are essential adaptive socialisation processes for addressing significant business challenges, such as climate change, emerging environmental legislation, and shifting consumer demand for environmentally friendly services. It teaches employees about a culture of sustainability that is constantly changing and looking to the future, rather than merely teaching them how to do things the way they are now. This study demonstrates that investing in skills makes hospitality businesses flexible enough to handle changing sustainability issues. For the stakeholder theory, a sustainable business is one that effectively manages its relationships with all stakeholders who have an interest in or are affected by its mission. Since employees are a key group of important stakeholders, this research have demonstrated that investing in upskilling and reskilling is not only a cost of doing business; it is also an important strategic response to the implicit requirements of employees for growth, stability, and meaning. Therefore, businesses that care about their employees' growth create a lot of goodwill, which leads to higher engagement, retention, and a readiness to adopt new, sustainable practices.

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Data availability
The data is available from the corresponding author upon request.

Declarations

Ethics approval and consent to participate
Authors confirms that the study was approved by the Research and Ethics Committee of the Department of Business Administration, Alex Ekwueme Federal University, Ndufu-Alike, Ebonyi State, Nigeria and certified that the study was performed following the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards. The authors confirmed that informed consent was obtained from all participants.

Consent for publication
Not applicable.

Competing interests
The authors declare no competing interests.

Author details
[1]Department of Research and Innovations, College of Economics and Management, Kampala International University (Main Campus), Kampala, Uganda
[2]Department of Management, University of Port Harcourt, Port Harcourt, Nigeria
[3]Department of Banking and Finance, Alex Ekwueme Federal University Ndufu-Alike, Ndufu-Alike, Ebonyi State, Nigeria
[4]Department of Research and Publications, Kampala International University (Main Campus), Kampala, Uganda
[5]Ivano-Frankivsk National Technical Oil and Gas University, Ivano-Frankivsk 76019, Ukraine
[6]Department of Business Administration, Alex Ekwueme Federal University Ndufu-Alike, Ndufu-Alike, Ebonyi State, Nigeria

[7]Department of Industrial Relations and Personnel Management, Michael Okpara University of Agriculture, Umudike, Nigeria
[8]Department of Accountancy, Alex Ekwueme Federal University Ndufu-Alike, Ndufu-Alike, Ebonyi State, Nigeria
[9]Department of Business Management, Kampala International University (Main Campus), Kampala, Uganda

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