



EXPLORING THE FACTORS INFLUENCING EMPLOYEES' INTRAPRENEURIAL BEHAVIOR OF PUBLIC UNIVERSITIES IN NORTHEAST, NIGERIA

Mohammed Abdullahi Umar and Abdullahi Mohammed

Department of Business Administration and Management, Gombe State Polytechnic, Bajoga.

*Corresponding Author's Email: abdumumar@gmail.com

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ABSTRACT: *This study examines the key factors influencing employees' intrapreneurial behavior in public universities across Northeast Nigeria. Guided by the positivist paradigm, it employs a quantitative, cross-sectional research design and collects primary data via a structured online questionnaire. Four federal universities from the region were selected, with a sample of 396 academic and non-academic staff; 220 valid responses were analyzed using PLS-SEM and SPSS. Findings reveal that organizational, individual, and external environmental factors significantly and positively influence employees' intrapreneurial behavior, while institutional barriers exert a positive but insignificant effect. The results suggest that strengthening organizational support, individual competencies, and external opportunities can enhance intrapreneurship, fostering innovation and institutional performance. Although common barriers have limited impact, prioritizing key drivers of intrapreneurial behavior can promote innovation and socio-economic development within Nigeria's public university sector and beyond.*

KEYWORDS: Employees' Intrapreneurial behavior, Intrapreneurship, Organizational factors, Individual factors and Environmental factors.



INTRODUCTION

Intrapreneurship, often described as entrepreneurship within an existing organization (Farrukh & Ghazzawi, 2024), has gained increasing attention in recent years as a critical driver for innovation, competitiveness, and organizational growth. In the context of higher education institutions, particularly public universities, fostering intrapreneurial behavior among academic and administrative staff can lead to the development of novel educational programs, research initiatives, and administrative processes that can enhance individuals and the institution's overall performance and societal impact (Afriyie, 2020; Moraes et al., 2023; Kuratko et al., 2014). As emphasized by both Sambo (2018) and Kuratko et al. (2014), institutions must continually reinvent themselves through intrapreneurship to ensure their relevance, growth, and long-term survival.

Intrapreneurial behavior is crucial for the success and relevance of public universities, particularly in an increasingly competitive and resource-constrained environment (Eze et al., 2018; Gunu & Tsado, 2017; Kanisoy et al., 2024; Sujatha & Mukherjee, 2023). As universities face pressure to innovate and adapt to changing societal needs, intrapreneurial behavior is recognized as essential and fosters a mindset among employees that promotes divergent thinking, generates novel concepts, and embraces risk-taking to propel growth and achieve success (Malaj et al., 2024).

Despite its large and diverse system, the performance of Nigeria's public universities has been a persistent issue for many years. The system has witnessed significant growth and expansion in recent decades (Ojo, 2022). However, numerous challenges such as inadequate funding, infrastructural deficiencies, and lack of competent & qualified staff have been affecting the universities (Kasimu et al., 2024; Iyamu & Kumo, 2020). In maintaining the quality and relevance of education, public universities in the northeast region are pivotal in driving regional development and serve as incubators of innovation, generate new knowledge, and produce skilled graduates who can contribute to the workforce, making the cultivation of intrapreneurial behavior within these institutions critical.

The unique organizational contexts and environmental factors of public universities present both opportunities and barriers to intrapreneurial activity. While there may be a strong motivation to innovate due to the pressing needs from both scholars and practitioners, there are also substantial challenges, including bureaucratic constraints, limited resources, and a potentially risk-averse culture, which can hinder the development and implementation of intrapreneurial initiatives (Otolu et al., 2024). In addition, employees who lack the corresponding traits or environmental stimuli may not exhibit entrepreneurial behavior (Fischer, 2011). Islam et al. (2024) argued that a good environment and support from an academic institution will not be enough if an academician does not have intrapreneurial attributes.

Moreover, excessive centralization of authority and bureaucratic rigidity within the sector produce boring uniformity and increased institutional complexities (Engzell et al., 2024); hence, this continuous trend has created a more hostile and turbulent environment as the institutions constantly need to adapt to the changing needs of the 21st century. These evolving needs have also intensified the innovation imperative for universities; even the most tradition-bound universities must be future-oriented, flexible and attentive to new ways of generating value and improving performance (Fox, 2023; Klofsten et al., 2021).



This research aims to investigate the influence of the factors that encourage employees' intrapreneurial behavior in public universities in Northeast Nigeria. By examining these factors, the study seeks to provide insights that could inform policies and strategies to enhance intrapreneurial activities within these institutions, ultimately contributing to the broader goal of improving educational outcomes and socio-economic development.

The rest of the paper is organized as follows. Section 2 analyzes the extant literature and development of hypotheses. Section 3 represents the methodology. Section 4 analyzes the outcomes of the study. Section 5 finishes with the conclusions.

Statement of the Problem

Meeting the expectations for fostering employee intrapreneurial behavior presents a considerable challenge (Fox, 2023). The environment of public universities as nonprofit organizations, despite the presence of innovative practices, is little encouraged by the institution's leadership to promote intrapreneurial behavior among its employees (Engzell et al., 2024; Valka et al., 2020). According to Kasimu et al. (2024), the work environment in Nigeria's higher institutions is often neglected by the internal supportive environment, leading to conditions that hinder the implementation of their core functions, let alone voluntary intrapreneurial activities. The apparent difficulty in encouraging entrepreneurial practices in this context demonstrates the importance of understanding how these innovative attitudes can be stimulated within the organization's boundary (Bonaventure et al., 2021; Pereira et al., 2018). There is a dire need to know the factors that might help the universities to become more entrepreneurial in their operations to deliver the desired services to stakeholders (Farrukh et al., 2016).

An In-depth study of the literature showed several factors that might help universities to become entrepreneurial; these factors include organization, environmental and individual level. Extant studies are silent on how these factors are understood as a university orientation in this fast and changing environment (Guerrero et al., 2020). Studies posit that organizational, individual and environmental factors spur intrapreneurial activities in an organization (Eze et al., 2018; Huang et al., 2021; Islam et al., 2024; Kanisoy et al., 2024; North, 2015; Valka et al., 2020).

Most intrapreneurship research focuses on examining the individual and organizational factors that precede intrapreneurial activities (Hermínio et al., 2021; Islam et al., 2024; Muthami, 2014; Revuelto-taboada, Alexandra Portalanza-chavarría, 2023; Valka et al., 2020). However, there is scarce evidence of the combination of environmental, organizational and individual factors as drivers of intrapreneurial behaviors of employees. It was deemed timely that this study was undertaken to examine the major factors influencing employees' intrapreneurial behavior in public universities in northeast Nigeria.



LITERATURE REVIEW

In this section, recent empirical research has been reviewed in the context of the variables selected in this study.

Theoretical Background

This study was conducted to examine the key factors influencing employees' intrapreneurial behavior. Based on these objectives in a theoretical perspective, this research provides new insights into the development of person-environmental fit (P-E fit) theory by internalizing P-E fit theory (Lewin, 1951), open innovation (Chesbrough, 2003), motivation theory (Herzberg, 1968), human needs theory (Maslow, 1943), and Social Cognitive Theory (Bandura, 1986).

The first perspective, P-E fit theory, proposes that individuals' performance, satisfaction, and well-being are influenced by the match between their personal characteristics (e.g. values, needs, abilities) and the demands and resources of their environment (Kristof, 2011). The P-E Fit theory suggests that the degree of alignment between individuals and their environments greatly influences employees' job attitudes and subsequent behaviors. The second perspective, open innovation, requires and produces intrinsic motivation from intrapreneurs to participate in the innovation process. The third perspective, motivational factors such as recognition and development opportunities, can increase intrinsic motivation so that autonomy, competence, and social connections affect intrapreneurs' motivation to innovate. The fourth perspective, Social Cognitive Theory (Bandura, 1986) suggests that individuals' behaviors are influenced by their beliefs about their own capabilities (self-efficacy) and their perceived value of the outcomes of their actions. This theory posits that when individuals perceive high value in an intrapreneurial activity and believe they have the ability to succeed (high self-efficacy), they are more likely to engage in such behavior. Research indicates that individuals with a strong sense of self-efficacy are more proactive, resilient, and willing to undertake new ventures, which are key aspects of intrapreneurial behavior (Bandura, 1997).

Hypothesis Development

Employees' Intrapreneurial Behavior and Institutional barriers or challenges

Employee intrapreneurship is conceptualized on the basis of employee activities that contribute to firm-level intrapreneurship and, more recently, as employees' agentic and anticipatory behaviors aimed at creating new businesses for the organization (i.e., venture behavior) and enhancing an organization's ability to react to internal and external advancements (i.e., strategic renewal behavior) (Gawke et al., 2019). According to Rigtering & Weitzel (2013) intrapreneurial employees and projects are considered important driving forces for a firm's innovation and strategic renewal.

Intrapreneurial behavior is characterized by risk-taking, proactiveness, and innovative behaviors of employees in an organization (Farrukh et al., 2019). Islam et al. (2024) provided a definition of intrapreneurial behavior as a bottom-up approach concentrating more on initiatives of an individual employee or member of an organization, ranging from out-of-the-box thinking, opportunity grabbing, and novel idea generation to a risk-taking attitude for bringing a better solution. According to Bau and Wagner (2015), intrapreneurial behavior of an organization is the process by which employees are empowered to implement, promote and discover new business opportunities and create economic value inside established firms.



In academia intrapreneurship is defined by Abreu and Grinevich (2024) as a process by which academic, managerial, support, and other staff ideate and introduce novelties across teaching, research, knowledge exchange, and governance and ensure organizational renewal and relevance. Within the context of University, Burkholder and Hulsink (2022) define academic intrapreneurship as the individual behaviors of academics within the University that lead to knowledge commercialization activities, which are distinct from their regular research and education initiatives. Intrapreneurial behavior can manifest in various forms, such as the development of new academic programs, the introduction of novel research initiatives, innovating and commercializing new technologies and ideas, developing radically new teaching methods and textbooks, fundraising, initiating stakeholder engagement, or the enhancement of administrative processes (Burkholder & Hulsink, 2022). Engzell et al. (2024) opined that non-academic staff such as faculty officers can also exhibit intrapreneurial behavior by taking initiatives beyond regular duties to serve a wider purpose within the academic environment.

However, Nigerian public universities are beset by systemic barriers that can curb staff intrapreneurship. For example, Bambur (2024) finds that rigid bureaucratic processes and resource shortfalls create barriers to innovation and responsiveness in university administration and notes that inadequate funding for staff development limits the ability of employees to acquire needed skills. Chronic underfunding further aggravates the problem: Ofor-Douglas (2024) describes how inflation and erratic budgets leave universities heavily overdependent on government funding, with funds often mismanaged. Leadership gaps compound these issues. Obadahun (2025) reports that political interference, weak accountability, and especially a lack of leadership training continue to hinder the performance of academic leaders, implying little managerial support for innovation. In such an environment, employees have fewer incentives or resources to innovate or act proactively on new ideas. These structural, financial, leadership, and training barriers can therefore dampen employees' initiative, innovation and opportunity recognition. We thus hypothesize that

H1: The barriers faced in Nigeria's public universities significantly influence employees' intrapreneurial behavior.

Organizational Factors and Employees Intrapreneurial Behavior

Intrapreneurial behavior among university employees is often shaped by the organizational environment in which they operate. The organizational factors mainly concern the internal context of an organization and its operations. The internal organizational environment includes factors within a business that have either positive or negative impacts on the actions and behaviors of intrapreneurs and its operations (Charles & Gareth, 2012). Academies, particularly their internal corporate environment, such as culture, structure, resources, and communication, play an important role in fostering employees' intrapreneurial behavior (Huang et al., 2021). According to Valka et al. (2020), employee engagement in opportunity-seeking behaviors requires a supportive intrapreneurial organizational climate that provides a culture of transparency, informality, communality, and the tools that employees need to generate ideas. Prior studies identify a list of organizational-related factors that affect intrapreneurship. The study summarizes these findings and proposes four major types of enablers that motivate intrapreneurial behavior within organizations: Top management support, resource availability, autonomy, and reward and recognition.



Top management support refers to the support provided to individuals in adopting entrepreneurial behaviors and mindsets (Sujatha & Mukherjee, 2023). When management actively encourages and supports employees to exhibit entrepreneurial characteristics, it creates a favorable work environment that nurtures intrapreneurship (Bartholomeusz, 2021). Resource availability equally increases the likelihood of intrapreneurial activities. According to Farrukh and Ghazzawi (2024), getting access to required resources is an essential organizational-level factor of intrapreneurship. For intrapreneurs to successfully pursue and implement their innovative ideas, they require adequate resources to support their efforts (Sujatha & Mukherjee, 2023). Also, Autonomy referred to as organizational freedom reflects the top-level managers' commitment to provide decision-making latitude and freedom to delegate responsibility and authority to middle-level managers and other subordinates (Rutherford & Holt, 2007). High autonomy can provide employees with a smoother and more diverse information flow and increase the likelihood of entrepreneurial behavior among employees. Reward and recognition mechanism represents an organization's use of the corresponding reward reinforcement to provide employees with material or psychological rewards (Wu, 2011). Rewards and recognition increase the employee's willingness to indulge in innovative and creative projects (Kumar & Parveen, 2021). Therefore, the design of the reward system needs to carefully cater to the needs and motivations of employees with an intrapreneurial mindset and should be in line with the goals of the organization (Sujatha & Mukherjee, 2023). Based on the above literature, a hypothesis can be derived from the study, namely:

H2: Organizational factors (management support, resource availability, autonomy, and reward and recognition) have significant influence on employees' intrapreneurial behavior.

Individual Factors and Employees' Intrapreneurial Behavior

Individual factors refer to the personal characteristics, beliefs, and behaviors of individuals within an organization that can influence their entrepreneurial thinking and actions (Huang et al., 2021). Individual factors capture the feelings and beliefs that flow from a person's background, culture, and personal attributes, as well as the emotions associated with their experiences. As is often found, innovation or novelty typically begins with an individual's character (Choi & Price, 2005). Apart from the characteristics of the individuals involved, personal factors such as propensity for risk-taking, desire for autonomy, need for achievement, goal orientation, and internal locus of control also explain the intention to become an 'intrapreneurial employee' (Azis & Amir, 2020).

Individual intrapreneurial thoughts are basic factors that give an organization the initial impetus to adopt intrapreneurial behavior, which provides sufficient justification for the continuation, modification, or rejection of such a strategy (Tende & Adekemi, 2022). North (2015) opined that intrapreneurship can effectively foster the progress of an organization if managers can manage employee motivation to grow and develop. This view makes sense because the drive to grow by generating new approaches or building new businesses is created at the individual level (Azis & Amir, 2020).

Previous studies have identified a range of individual-related factors that influence intrapreneurship. With regard to self-efficacy, Chouchane et al. (2021) described self-efficacy as an individual's belief in the ability to accomplish an intrapreneurial role, task, or set of behaviors. Employees with high self-efficacy exhibit innovative behavior and demonstrate intrapreneurial intentions (Kanısoy et al., 2024). Wakkee et al. (2010) and Zampetakis et al.



(2009) found a relationship between self-efficacy and employees' intrapreneurial spirit, indicating that higher self-efficacy is associated with a higher likelihood of intrapreneurial behavior. Moreover, Personal competency refers to the ability of an individual to complete a particular task or job, which is measured by their level of performance and usually includes both technical and behavioral elements of an individual (Patacsil & Tablatin, 2017; Mata et al., 2021). Personal competence is a key factor in determining employee intrapreneurial behavior from the individual level (Kumar & Parveen, 2021). Neessen et al. (2019) and Stam et al. (2019) suggest a number of competency-related characteristics such as perception of self-capability, personal knowledge, past experience, skills, and abilities, etc. Neessen et al. (2019) found that a person with persistent and endurance skills will have higher opportunities to form intrapreneurial behavior, as they are more patient in trying and developing new innovation. This leads to the following hypothesis:

H3: Individual factors (self-efficacy and Personal competence) have significant influence on employees' intrapreneurial behavior.

Environmental Factors and Employees' Intrapreneurial Behavior

The external environmental factors constitute everything beyond the organizational boundary that is capable of affecting organizational performance either directly or indirectly (Gunu & Tsado, 2017; López et al., 2021). While some of the factors are favorable to the organization, others might be viewed as unfavorable (Kumar & Parveen, 2021). The external environment challenges employees to develop entrepreneurial strategic vision that enables them to respond to an ever-changing and demanding society and to provide public value.

Previous studies have identified a range of external environmental factors that influence intrapreneurial behavior. As viewed by Kumar and Parveen (2021) and Valka et al. (2020), the external environment is an important antecedent for the growth of intrapreneurial activities. For instance, advances in technology, as an external factor, create new ways for employees to be innovative in their work. Huang et al. (2021) revealed that exposure to new technology-based systems helps support the development, monitoring and implementation of new business ideas, which lead to intrapreneurial outcomes. Competitive rivalry refers to the intensity of competition in the market, as it forces organizations to explore opportunities to innovate in products, markets, strategies, or business models in order to compete and survive (Chen et al., 2015). When rivalry is intense, the institutions or universities must innovate, explore new opportunities, and find new ways to create and maintain their competitive position (Zahra, 1993). Employees' intrapreneurial behavior is crucial for maintaining competitive advantages and driving continuous innovation within organizations (Farrukh & Ghazzawi, 2024). Employees' intrapreneurial behavior is positively affected by positive factors like policies/regulatory changes, external funding, socio-cultural context and dynamism.

H4: Environmental factors (advances in technology, Competitive rivalry and regulatory changes) have significant influence on employees' intrapreneurial behavior.



METHODOLOGY

The research was influenced by the Positivist paradigm. A quantitative research design was adopted. The time series adopted is cross-sectional. Moreover, the study is based on primary data and supported by secondary data. The instrument of this study is a structured questionnaire. In line with the goal of the study, we selected 4 public (federal) universities from northeast Nigeria for the survey. We excluded all state universities because of the differences in the ownership and financing structure of the institutions. The sample size for the study is 396 university employees, including both academic and non-academic staff. An online survey questionnaire was circulated to the selected universities in the northeastern region of Nigeria, from which 220 respondents took part in the survey. The collected data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) and SPSS. The variables for the study were measured using item scales developed by previous scholars with minor modifications where necessary to fit the study context.

FINDINGS OF THE STUDY

Both descriptive analysis and model assessment have been performed to present the demographic profile of respondents as well as to analyze the validity of the constructs used in this study, respectively.

Descriptive Analysis

Descriptive analysis was performed using the SPSS tool and presented in the form of a frequency table indicating the percentage of each response concerning the demographics (gender, age, category of staff, years of service, and qualification) of the respondents.

The demographic characteristics of respondents from selected public universities revealed that most respondents were male, predominantly within the 30–39 years' age group. A majority were academic staff with 5–10 years of service, indicating a moderately experienced workforce. In terms of qualification, over half of the respondents held master's degrees, reflecting a highly educated sample typical of university settings in Northeast Nigeria. Further information on the respondents can also be seen in Table 1.

Table 1: Demographic Information

S/N	Demographics	Descriptions	Frequency	Percentage
1.	Gender	Male	181	82.3
		Female	39	17.7
2.	Age	Below 30 Years	17	7.7
		30–39 Years	123	55.9
		40–49 Years	70	31.8
		Above 50 Years	10	4.5
3.	Category Of Staff	Academic Staff	190	86.4
		Non-Teaching Staff	30	13.6
4.	Years Of Service	Less Than 5 Years	39	17.7
		5–10 Years	123	55.9
		11–15 Years	36	16.4



		16 Years And Above	22	10.0
5.	Qualification	ND/NCE	0	0
		Bsc/B.A.	60	27.3
		Msc/M.A.	111	50.5
		PhD	49	22.3

Source: SPSS Output (2023)

Assessment of the Measurement Model (Outer Model)

The first stage of the PLS-SEM was performed by estimating the measurement model. Results show that indicator loadings for all items exceeded the recommended value of 0.7 (Hair et al., 2017). The values for AVE ranged between 0.501 and 0.703, hence exceeding the benchmark value of 0.5 and CR values ranged between 0.833 to 0.955 exceeding the benchmark value of 0.7 (Hair et al., 2017); see Table 2. The measurement items' discriminant validity was examined following the criteria of Fornell and Larcker (1981); see Table 3. The table shows the discriminant validity of the construct used in the model and shows that all values of AVEs present in the diagonal are higher than the off-diagonal values of inter-construct squared correlations.

Table 2: Result of Reliability and Convergent Validity

Constructs	Items	Loadings	Cronbach's alpha	Composite reliability	AVE
Barriers	BR1	0.620	0.877	0.902	0.609
	BR2	0.734			
	BR3	0.763			
	BR4	0.817			
	BR5	0.892			
	BR6	0.827			
Employees Behavior	EIB1	0.900	0.947	0.955	0.703
	EIB2	0.737			
	EIB3	0.856			
	EIB4	0.772			
	EIB5	0.784			
	EIB6	0.833			
	EIB7	0.885			
	EIB8	0.880			
	EIB10	0.881			
Environmental Factor	EVF1	0.594	0.823	0.866	0.568
	EVF2	0.863			
	EVF3	0.784			
	EVF4	0.768			
	EVF5	0.734			
Individual Factor	IF1	0.875	0.904	0.926	0.677
	IF2	0.877			



	IF3	0.772			
	IF4	0.845			
	IF5	0.787			
	IF6	0.775			
Organization Factors	OF1	0.680	0.750	0.833	0.501
	OF2	0.822			
	OF3	0.696			
	OF5	0.651			
	OF6	0.677			

Source: PLS-SEM Output

Table 3: Result of Discriminant Validity—Fornell and Larcker

	BR	EIB	EVF	IF	OF
BR	<i>0.780</i>				
EIB	0.087	<i>0.839</i>			
EVF	0.060	0.272	<i>0.754</i>		
IF	-0.038	0.547	0.187	<i>0.823</i>	
OF	0.093	0.331	0.411	0.232	<i>0.708</i>

NOTE: The bolded italic values in diagonal are the square root of AVE while the off-diagonal values are the inter-construct squared correlations.

Moreover, the discriminant validity criteria in this study also pursued the criteria from Henseler et al. (2015) to estimate the heterotrait-monotrait (HTMT) of each variable in the model. Table 4 informs that the HTMT ratio of each variable was under 0.90 to reach the discriminant validity criteria.

Table 4: Heterotrait-monotrait ratio

	BR	EIB	EVF	IF	OF
BR					
EIB	0.088				
EVF	0.093	0.243			
IF	0.059	0.570	0.179		
OF	0.119	0.367	0.508	0.266	

Source: PLS-SEM Output



Assessing the Structural Model (Inner Model)

The structural model presented in Figure 2 was validated using the techniques recommended in Hair et al. (2019) and Sarstedt et al. (2019), it includes assessing collinearity between constructs, significance of the hypothesized paths, the explained variance using the coefficient of determination (R^2), effect size (f^2) for direct effects, and also, the predictive relevance (Q^2) of the research model.

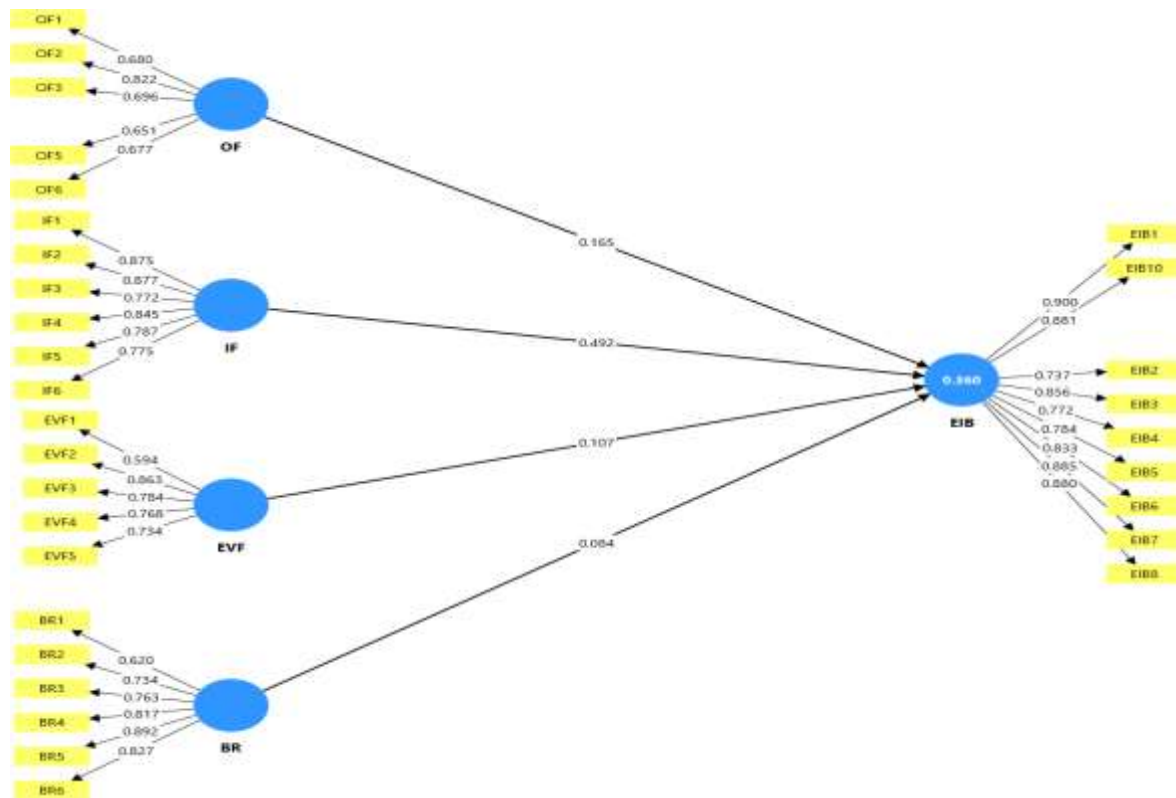
Multicollinearity tests were conducted to ensure the adequacy of the data in meeting the assumptions necessary for further analysis. This test is based on the value of Variance Inflation Factor (VIF) that does not exceed conservative value of 5.0 (Hair et al., 2019). Based on these criteria, the structural model in Figure 2 confirmed that no high correlations existed between the independent variables, as the maximum value of the VIF of 4.123 shows that all indicators have a VIF value less than the specified limit and are declared free from symptoms of Multicollinearity.

In addition, the coefficient of determination (R^2) approach is commonly used to evaluate structural models. The function of R^2 is to determine how much influence exogenous latent variables (BR, EVF, IF, OF) have on endogenous variables (EIB). Table 5 presents the outcome of the inner model's prediction through the explained variance (R^2) between the latent variables analyzed to be (R^2) = 0.36. The value indicates how much of the total variation in the factors can explain the employees' intrapreneurial behavior and it was found that the research model has a large level of explained variance when applying the techniques in Cohen (1992). In this case, 36% can be explained, while other variables not included in the regression model explain the remaining 64%. Similarly, the predictive relevance ($Q = 0.344$) of the research model can be considered large when applying the criteria in —Hair et al. (2017). Thus, implying that the model has a large predictive relevance of the PLS paths.

Table 5. Coefficient of determination (R^2) and Predictive Relevance

	R-square	R-square adjusted	
EIB	0.360	0.348	
	Q^2 predict	RMSE	MAE
EIB	0.344	0.816	0.653

Source: PLS-SEM Output

Figure 1: **STRUCTURAL MODEL**

Hypothesis Testing

The degree of significance of each relationship in the hypothesis can be observed with the t-statistic and the p-value of the path coefficient or inner model analysis. A hypothesis is considered significant if its t-statistic is greater than 1.96 and its p-value is less than 0.05. Next, the model is evaluated by looking at the significance value and performing bootstrapping techniques to identify influences between the four variable factors (barriers, organizational, individual, and environmental) with the employees' intrapreneurial behavior.

Equally, the hypothesized direct effect between BR → EIB ($t = 1.096$, $\beta = .084$, $p = .273$), the results depicted that BR has a positive but statistically insignificant effect on EIB. However, EVF → EIB ($t = 1.963$, $\beta = .107$, $p = .05$), IF → EIB ($t = 9.203$, $\beta = .492$, $p = .000$), and OF → EIB ($t = 2.537$, $\beta = .165$, $p = .011$) were all found to have a positive and statistically significant effect on EIB.

Table 6: Results of direct effects (Path Coefficient)

Hypothesis Testing	Beta Value	mean (M)	(STDEV)	T statistics	P-values	Decision
Ho1: BR → EIB	0.084	0.089	0.077	1.096	0.273	Not support
Ho2: OF → EIB	0.165	0.169	0.065	2.537	0.011	Support
Ho3: IF → EIB	0.492	0.489	0.054	9.203	0.000	Support
Ho2: EVF → EIB	0.107	0.117	0.054	1.963	0.050	Support

Source: *PLS-SEM Output*



DISCUSSION

This study investigated the influence of determining factors (BR, OF, IF & EVF) on employees' intrapreneurial behavior (EIB) in some selected public universities in northeast Nigeria. The study adopted the reflective formative type II approach for specifying, modeling, and validating the research model using the disjointed two-stage technique recommended in Ali et al. (2018) and Sarstedt et al. (2019). The study has confirmed the direct effect relationship between the study variables such as BR, OF, IF, EVF and EIB. The Model has revealed that OF, IF, and EVF have a positive and significant effect on EIB. While BR has a positive but not significant effect on EIB.

As depicted in Table 6, hypothesis H1, which asserts the barriers faced in Nigeria's public universities significantly influence employees' intrapreneurial behavior, was rejected using PLS output; the effect ($\beta = .084$, $t = 1.096$, $p = .273$) found between these two variables was not statistically significant. Hypothesis H2, which states that organizational factors (management support, resource availability, autonomy, and reward and recognition) have significant influence on employees' intrapreneurial behavior. The result ($\beta = .165$, $t = 2.537$, $p = .011$) provides sufficient evidence to support a significant effect of organizational factors on employees' intrapreneurial behavior. Hypothesis H3, which specifies the significant influence of individual factors (self-efficacy and Personal competence) on employees' intrapreneurial behavior at public universities in northeast Nigeria, is also supported with positive and significant results ($\beta = .492$, $t = 9.203$, $p = .000$). Lastly, Hypothesis H4, which states that environmental factors (advances in technology, Competitive rivalry and regulatory changes) have significant influence on employees' intrapreneurial behavior, is also supported ($\beta = .107$, $t = 1.963$, $p = .05$). Although the effect for environmental factors was only marginally significant ($p = .05$), it supports the theoretical prediction of a positive link between the variables (EVF $\rightarrow$ EIB).

The empirical evidence from this study underscores the multifaceted nature of intrapreneurial behavior in public universities, emphasizing the significant roles played by organizational and environmental factors, alongside individual attributes. Notably, the findings reveal that individual factors have the most substantial impact on fostering intrapreneurial behavior among both academic and non-academic staff. This aligns with prior literature that highlights traits such as self-efficacy, competence, and personality attributes as vital for innovation (Fischer et al., 2019). Consequently, universities should prioritize developing these individual competencies through targeted training and capacity-building initiatives, which could foster a more vibrant culture of intrapreneurship.

Organizational support, particularly leadership and culture, also significantly influences intrapreneurial activities. The study confirms that supportive leadership and a conducive organizational climate positively affect employees' intrapreneurial behaviors, echoing previous insights (Valka et al., 2020). However, the current situation indicates that many Nigerian public universities lack sufficient institutional support for intrapreneurship, with leadership often emphasizing traditional roles over innovative initiatives (Kasimu et al., 2024). Addressing this gap requires strategic organizational change, including fostering a culture that rewards innovation and entrepreneurial endeavors.

The external environmental context, characterized by resource constraints and bureaucratic challenges, was also found to influence intrapreneurial behavior. While external factors like



government collaboration and industry partnerships can facilitate innovation, the study highlights that in Northeast Nigeria, the scarcity of resources and complex administrative processes limit the universities' ability to leverage external opportunities effectively. Nonetheless, fostering external collaborations remains critical for creating an ecosystem that nurtures entrepreneurial initiatives despite contextual challenges.

Overall, the findings advocate for a holistic, integrated approach to promoting intrapreneurship, where individual development is complemented by organizational reforms and strategic engagement with external stakeholders. Enhancing intrapreneurial behavior in Nigerian public universities requires concerted efforts across all three domains to build a sustainable culture of innovation and community development.

CONCLUSIONS AND IMPLICATIONS

This study has illuminated the complex interplay of individual, organizational, and environmental factors that influence employees' intrapreneurial behavior within public universities in Northeast Nigeria. The results reveal that individual characteristics, such as self-efficacy and personal competence, exert the most significant influence on fostering intrapreneurial activities, underscoring the importance of developing staff capabilities through targeted training programs. Additionally, organizational support, particularly leadership, reward and recognition, plays a vital role in encouraging intrapreneurship, though current institutional practices often fall short of this ideal. External environmental factors, including resource limitations and bureaucratic hurdles, also impact intrapreneurial initiatives, highlighting the need for external collaborations to create enabling ecosystems for innovation.

The findings suggest that fostering intrapreneurship in public universities requires a holistic approach that simultaneously enhances individual skills, reforms organizational structures and cultures, and actively engages external partners. Addressing these interconnected factors can unlock the intrapreneurial potential of university staff, ultimately contributing to institutional vitality, innovative educational practices, and socio-economic development in the region. Policymakers and university leadership should thus prioritize strategic interventions across these domains to cultivate a sustainable intrapreneurial ecosystem conducive to continuous growth and societal impact.

FUTURE RESEARCH DIRECTION

Future research should focus on longitudinal studies to assess how intrapreneurial behavior and influencing factors evolve within university settings, providing insights into the sustainability of intrapreneurship initiatives. Additionally, exploring the role of organizational culture, particularly aspects such as openness to change and risk tolerance, can offer a deeper understanding of internal enablers and barriers to intrapreneurial activities. Lastly, future studies should investigate how technological advancements and digitalization influence intrapreneurial behaviors and opportunities within university contexts.



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