



THE INFLUENCE OF JOB RESOURCES ON JOB PERFORMANCE WITH WORK ENGAGEMENT AS A MEDIATING VARIABLE: A STUDY OF VOCATIONAL BUSINESS EDUCATORS IN PUBLIC UNIVERSITIES IN SOUTH-SOUTH, NIGERIA

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Abstract

Launching and managing a vocational business venture is one of the greatest legacy an individual can bequeath for him/herself at this present time in Nigeria. Yet, there is chronic shortage of enterprising individuals and the situation is further compounded by insufficient vocational business educators and instructors who would help to prepare individuals to launch and manage a vocational business ventures and continuously improve their knowledge and skills. A number of vocational business educators perform poorly on the job and has negatively influence the workforce needs of the entrepreneurial sector and vocational business education programme. Addressing the issue of poor performance of vocational business educators on the job is particularly important not only to respond to the chronic shortage of vocational business educators but also the deficit of enterprising individuals. It is important to ensure that vocational business educators receive sufficient or abundance resources and engaged at work because of the positive impact these job situations contribute to job performance. Considering the importance of vocational business educators to the entrepreneurial sector, there is need to examine the influence of job resources on vocational business educators job performance with work engagement as a mediating variable. The purpose of this study therefore is to examine the relationships between job resources, work engagement, and job performance of vocational business educators in the universities in South-South, Nigeria. The findings indicated positive correlation between job resources, work engagement and job performance. The findings also indicated that work engagement fully mediated the relationship between job resources and job performance. This research builds on the work of previous scholars by further supporting the relationships between job resources, work engagement and job performance specifically in the context of vocational business educator. University administrators and managers play a role in ensuring that strategies are in place to motivate and engage vocational business educators as practical ways to reduce poor performance. In particular, university administrators and managers should recognize vocational business educators' contributions, provide career development opportunities, and promote challenging responsibilities and autonomy within the classroom and university. It is critical to have adequate and qualified vocational business educators to prepare individuals to engage in entrepreneurial careers and lifelong learning.



Introduction

Possessing requisite knowledge and skills to launch and manage a vocational business venture is one of the important legacy an individual can bequeath for him/herself in Nigeria at this present time. Despite the importance of acquiring requisite knowledge and skills to launch and manage a vocational business venture, there is chronic shortage of competent and qualified vocational business educators in Nigeria (Edokpolor & Owenvbuigie, 2017), who would have help in executing the tasks of imparting requisite knowledge, conducting quality research, managing adequate resources, including other secondary job responsibilities. However, performing these numerous and complex job responsibilities has, in turn, put a strain on the vocational business educators (Sheppard, 2016; Ile & Edokpolor, 2022; Edokpolor & Imeokparia, 2022). As such, the tendency of vocational business educators to be performing poorly on the job may be one of the primary reasons many students are ill-equipped with the requisite knowledge and skills to launch and manage a vocational business venture, despite the importance of entrepreneurial careers to sustainable development of the nation's economy. With the advent of a constantly changing work environment, the need for vocational business education management and knowledge and skills acquisition increases and vocational business educators play a major role in managing quality vocational business education programme and equipping students with the requisite knowledge and skills for a vocational business venture startup and management upon graduation. The gap between the knowledge and skills acquired by students and the knowledge and skills required by students to launch and manage vocational business ventures will negatively affect the quality management of vocational business education system and more broadly the sustainable development of the nation's economy. Therefore, it is critical to have enough and highly trained vocational business educators.

Vocational business education is a competency-based programme that is planned and organized to equip students with specific career skills especially in post-secondary institutions. It prepares both youths and young adults for a wide range of early careers in professional and occupational sub-disciplines, or in a related field in the industry. Vocational business education also prepares individuals to take a teaching job in numerous occupations including vocational business-related careers. Some of the skills students may acquire in the vocational business education programme include office management and technology skills, marketing skills, and accounting skills, among others (Edokpolor & Oduma, 2018). The possessions of these skills are foundational to vocational business education graduates in that it reinforces their interest for a more advanced vocational business education programmes (Igbinedion, Edokpolor & Oyenuga, 2015; Edokpolor & Omiunu, 2017; Edokpolor & Muritala, 2018). Although part of the vision and mission of vocational business education managers and administrators includes the production of competent and qualified vocational business educator as this will help to alleviate the chronic shortage of competent and qualified vocational business educators in Nigeria (Edokpolor & Imafidon, 2017; Edokpolor, 2019). If not addressed soon, this deficiency will negatively influence the workforce needs of the vocational business education programme.

In general, many vocational business educators in public universities in Nigeria perform poorly on the job for several reasons. For instance, empirical research reported a significant relationship between hindrance job demands and poor job performance (Bakker, Demerouti & Sanz-Vergel, 2014; Tadić, Bakker & Oerlemans, 2014; Tadić, Oerlemans & Bakker, 2014; Cross, 2019; Schilbach, Baethge & Rigotti, 2021; Edokpolor & Oviawe, 2022a&b; Edokpolor, Imeokparia & Egbri, 2023; Fernandez de Henestrosa, Sischka & Steffgen, 2022, 2023). Another empirical research demonstrated a significant relationship between lack of job resources and poor job performance (Schaufeli & Taris, 2014; Anjum, Ming, Siddiqi & Rasool, 2018; Naidoo-Chetty & du Plessis, 2021; Ile & Edokpolor, 2021; Edokpolor & Oviawe, 2022b; Edokpolor, Imeokparia & Edigbonyia, 2023;



Adekiya, 2023). Yet, other empirical research reported a significant relationship between work burnout and poor job performance (Chiaburu, Peng, Oh, Banks & Lomeli, 2013; Lizano, 2015; Maslach & Leiter, 2016; Bang & Reio, 2017; Sastre-Morcillo, Blanco-Encomienda & Latorre-Medina, 2022; Edopkolor, Legg-Jack & Imeokparia, 2022; Bhat & Tariq, 2022; Edokpolor, Imeokparia & Asemota, 2023).

Some empirical research further reported a significant relationship between low self-efficacy and poor job performance (Del Libano, Llorens, Salanova & Schaufeli, 2012; Hidayat & Panjaitan, 2022; Kanapathipillai, Shaari & Mahbob, 2021; Ile & Edokpolor, 2022; Wijayana, Rahayu & Wahyuningsih, 2022; Annisa & Ginarti, 2023; Jumaharta & Irbayuni, 2023; Utami & Mujanah, 2023). Other empirical research also reported a significant relationship between poor job satisfaction and poor job performance (Kumari, 2011; Jaradat, 2020; Rahmizal & Dewi, 2022; Yean, Johari, Yahya & Chin, 2022; Inayat & Khan, 2023). Yet, some other empirical research reported a significant relationship between poor work engagement and poor job performance (Kim, Kolb & Kim, 2013; Karatepe, Beirami, Bouzari & Safavi, 2014; Wood, Oh, Park and Kim, 2020; Edopkolor, Chukwuemeke & Osifo, 2022; Edokpolor & Owenvbuigie, 2022; Yao, Qiu, Yang, Han & Li, 2022).

Job resources is one of the most studied topics in work and organizational psychology literature because of its positive impact on employees behavioural outcomes in general and job performance in particular (Schaufeli & Taris, 2014; Bakker, Demerouti & Sanz-Vergel., 2023). It is concerned with the working conditions involving specific resources that represent physical, social or organizational aspect of the job that might help reduce job demands and the associated physiological and psychological costs (Van den Broeck, Van Ruyseveldt, Vanbelle & de Witte, 2013). Job resources consist of environmental characteristics of the job that serve as a key predictor of work engagement of vocational business educators (Edopkolor & Imeokparia, 2022). Literature has shown that resourceful individuals are likely to be more engaged at work resulting in increased behavioural outcomes (Baldoni, 2013; Quantum Workplace, nd). In the human resource management and organizational psychology literature, engaged employees are individuals who express themselves physically, cognitively and emotionally during job performance (Khan, 1990; Edokpolor & Owenvbuigie, 2022). The authors of this research therefore theorized that vocational business educators who are engaged at work can be described as having the same attributes, in turn, are less likely to perform poorly on the job.

In today's dynamic working environment, it is important to ensure that vocational business educators receive adequate job resources and are engaged at work because of the level of effort and energy they put in accomplishing the goals of vocational business education. Little research has been done on the job performance of vocational business educators. Although, research has been conducted on talent management strategies such as selection, development and retention of talented vocational business educators and how they can help the vocational business education to accomplish the best possible result (Edokpolor, 2019). Research has also been conducted on job resources and its positive influence on prosocial behaviour of technical and vocational education and training lecturers (Edokpolor & Oviawe, 2022b). More recently, research was conducted on working environment dimensions such as job demands working environment and job resources working environment and their impact on vocational business educators' behavioural outcomes such as job performance and prosocial behaviour. However, the factors influencing vocational business educators to perform better on the job needs further research (Edokpolor *et al.*, 2022; Edokpolor *et al.*, 2023). Considering the importance of vocational business educators' job performance to the vocational business education workforce and sustainable development of the nation's economy, there is a need to examine job resources and work engagement and the impact this may have on job performance. While job resources, work engagement and job performance have been studied

extensively, these variables have not been examined together in the context of vocational business educators despite the existence of poor job performance and the significance of resourceful and engaged vocational business educators.

This research will address a gap in the literature and provide insight to the university administrators and managers. It will provide insight on how job resources positively influence the job performance of staff as a result of work engagement. This research will also provide insight on how staff working environment needs to be highly resourceful and engaging at all times. It will also provide insight on how to make informed decisions about where and when to utilize resources in that staff will be performing their job in a more resourceful and engaging work environment. Providing opportunity for staff especially the vocational business educators to perform better on the job will have an impact on the future labour market projections and sustainable development of the nation's economy. The purpose of this research is to investigate the influence of job resources on job performance of vocational business educators with work engagement as an intervening variable. The following questions need to be addressed in this research:

1. What is the relationship between job resources, work engagement, and job performance of vocational business educators?
2. What is the mediating influence of work engagement in the relationship between job resources and job performance?

Details are provided on the following sections (1) the development of conceptual model (2) the theoretical framework (3) the hypotheses proposition (4) the method and procedure (5) the result and discussion (6) the implications (7) conclusions and (8) recommendations.

Development of Conceptual Model

The authors developed a conceptual model (see Figure 1) to support the research. The conceptual model described the association between job resources, work engagement and job performance of vocational business educators. The authors developed the conceptual model upon which the hypothetical propositions of all the variables and the mediating effect are based.

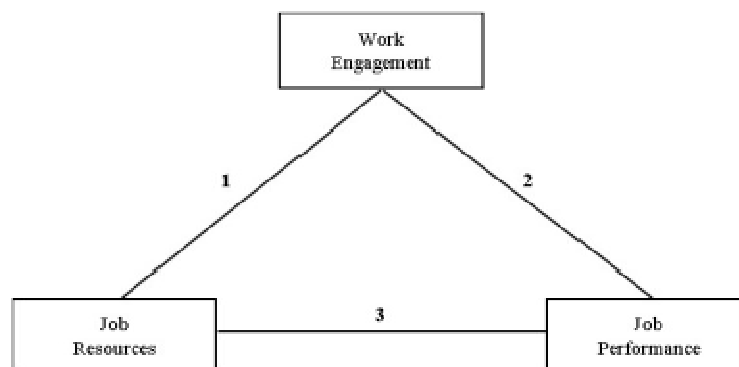


Figure 1. Conceptual Model of Hypothesized Relationships between Job Resources and Job Performance with Work Engagement as a Mediator

The underlying assumptions of this research is that there will be a significant positive relationship between job resources, work engagement and job performance; and that work engagement will fully mediate the relationship between job resources and job performance. These



assumptions are fully supported by the Job Demands-Resources (JD-R) model proposed by Demerouti, Bakker, Nachreiner and Schaufeli (2001).

Theoretical Framework

The research is underpinned by the JD-R model proposed by Demerouti *et al.*, (2001). The JD-R model is used in this research to understand how job resources and work engagement positively influence the job performance of employees. One of the proposition of the JD-R model is that every occupation or profession has its own specific motivational factor associated with work functioning, which include job resources. Demerouti, *et al.*, (2001) depicted that job resources that are high are experience by employees as positive because their motivational, effective, and functioning role is increased as an outcome or consequence. The JD-R model is relevant to this research because it proposed a related psychological process such as the motivational process in which job resources can reinforce work engagement, in turn, positively influence job performance. The JD-R model is related to this research in that when vocational business educators experience high job resources, they will equally experience high work engagement. When vocational business educators experience high work engagement, they will equally experience better job performance. When vocational business educators experience high job resources, they will equally experience better job performance. Furthermore, the relationship between high job resources and better job performance will be as a result of high work engagement.

Hypotheses Development

Influence of Job Resources on Work Engagement

An existing study showed that job resources contribute to the work engagement of employees that provide or receive job resources (Ryan & Martela, 2016). More than four decades ago, Hackman and Oldham (1980) developed the job characteristics theory. They proposed five job characteristics, which they argued to enhance the motivational potential of the job and positively influence salient work-related outcomes such as work engagement. These five job characteristics include the skills variety (that is, the degree to which a job require various activities, enabling employees to develop a variety of skills), task identity (that is, the degree to which a job require doing a whole and identifiable piece of work from the beginning to the end), task significance (that is, the degree to which a job impact other people's lives), job autonomy (that is, the level of freedom, independence, control and discretion in carrying out a job) and performance-based feedback (that is, the degree to which job activities provide employees with direct and clear information about the effectiveness of their job performance).

The JD-R theory proposes a positive interplay between job resources and work engagement (Bakker & Demerouti, 2014). Specifically, the JD-R theory depicted that job resources are particularly motivating and related to work engagement when challenges are low and when hindrances are high. However, there are some empirical research supporting these assumptions (Tadić, Bakker & Oerlemans, 2015; Reina-Tamayo, Bakker & Derks, 2017), but there is a limited empirical support that use Nigeria as a case study. Job resources may indeed positively associate with work outcomes such as work engagement. Empirical research has indeed specifically showed that job resources such as colleagues support make a positive contribution to the work engagement of employees (Bakker, *et al.*, 2014) and reduce the stressful impact of hindrance job demands on stressful reactions. Although, early versions of the JD-R theory proposed that job resources such as job autonomy, performance feedback and variety of skills utilization are the most important antecedents of work engagement. On the basis of existing research within the JD-R framework,



organizational context in the form of job resources play an important role in fostering work engagement (Van der Heijden & Bakker, 2011).

Furthermore, Tadic, *et al.*, (2015) examined the role of job resources in the context of the challenge-hindrane stressors framework that focused on work well-being dimension that is closely related to work engagement. Lecturers were asked to fill a work engagement questionnaire. The findings showed that job resources such as opportunities for career or self-growth, coaching and performance feedback had influence on work engagement. Taken together, these findings have suggested that colleagues/HODs support is more important when employees are challenged in their work and experience the job resources to deal adequately with these challenges. Within this relationship and subsequent research on work engagement, job resources are identified as having the potential role to positively impact work engagement. Therefore, the authors of this research expect a significant and positive relationship between job resources and work engagement of vocational business educators in public universities in South-South Nigeria.

Hypothesis 1: Job resources will positively relate to work engagement.

Influence of Work Engagement on Job Performance

Over the years, empirical research has revealed a positive relationship between work engagement and job performance (Demerouti & Cropanzano, 2010). Research have shown that employees who are engaged on the job are highly energetic and efficacious and represent individuals who exercise influence over events that affect their lives (Bakker, 2011). Because of their positive attitude and high activity level, employees who are engaged on the job will create their own positive feedback in terms of recognition, appreciation and success. Not surprisingly, work engagement is a better predictor of job performance than job satisfaction or workaholic (Bakker, 2011). The JD-R theory proposed a positive interplay between work engagement and job performance (Bakker & Demerouti, 2014).

Rigorous research showing a positive interplay between work engagement and job performance are constantly increasing. For instance, Sante, Eaton and Viswesvaran (2021) found that employees who are engaged on the job receive higher ratings from their colleagues on task and contextual performance. This result implied that employees who are engaged on the job perform better and are willing to work beyond their primary job responsibilities. In a research of employees working in Spanish restaurants and hotels, Gil-Beltrán, Llorens and Salanova (2020) found that employees' ratings of their work engagement where positively related to customer ratings of job performance. In an empirical research of employees working in fast food restaurants in Greece, Bakker, Rodríguez-Muñoz and Sanz-Vergel (2015) found a compelling case for the predictive value of work engagement for job performance. Participants were asked to fill in a diary and survey booklet. Consistent with the hypotheses testing, the result showed that employees who were more engaged on the job were characterized by abundance job resources. In an experimental study, Christian, Garza and Slaughter (2011) found a positive interplay between high work engagement and better job performance. More specifically, Bakker and Bal (2010) found that teachers who are engaged on the job received higher ratings on task performance from their supervisors compared to their colleagues who are not engaged on the job. Therefore, the authors of this research expected a significant and positive relationship between work engagement and job performance of vocational business educators in public universities in South-South Nigeria.

Hypothesis 2: Work engagement will positively relate to job performance.

Influence of Job Resources on Job Performance

It has been suggested by Zafar-Uz-Zaman, Lou, Muhammad and Arslan (2014) that job resources will predict job performance to be influenced by five job characteristics (that is, skills variety, task identity, task significance, job autonomy and performance feedback). Based on the Hackman and Oldham (1980) job characteristics theory (JCT), there seem to be a salient interplay between the five motivating job characteristics as listed above and job performance. More than four decades ago, Hackman and Oldham (1980) developed the JCT and proposed that the five job characteristics may enhance the motivational potential of jobs and positively influence job performance. These job characteristics involves enabling the worker to develop a variety of skills and talents; the degree to which the job requires doing a whole and identifiable piece of work from beginning to end; the degree to which the job impacts other employee's lives; the level of freedom, independence, and discretion in carrying out the job; and the degree to which job activities provide employees with direct information about the effectiveness of job performance.

Mäkikangas, Bakker, Aunola and Demerouti (2010) reported that mean levels of job resources and job performance and changes in both variables are positively related to each other. Vocational business educators who experience high level of job resources will equally experience better job performance. Moreover, when job resources increased over time, the job performance of vocational business educators can as well increase. To substantiate this assumption, empirical research has indeed showed that job resources can make a positive contribution to job performance (Bakker, *et al.*, 2014). Besides, an empirical research by Wood, Veldhoven, Croon and deMenezes (2012) indicated that significant positive relationships exist between job resources and the job performance of employees. This implied that job resources, which represent an important component of job characteristics, will influence better job performance of business educators.

More importantly, job resources refer to the endowments and the facilities provided by organizations that assist employees in accomplishing work goals, reducing job demands and fostering work engagement, which may lead to improved job performance of employees. Job characteristics have been defined as a set of environmental variables that are widely thought to be important antecedents of job performance of employees (Matilu & K'Obonyo, 2018). This implied that job resources may allow employees to seize the opportunity to utilize variety of skills to perform the job, identify themselves closely with the job completed, feel empowered in performing the job through the freedom obtained from the job and get adequate feedback on the job done. Job resources may also help to induce employees' growth and development through a motivational process and been able to be used in accomplishing work goals. The authors of this research therefore examined the influence of job resources on job performance through work engagement. However, the influence of job resources on better job performance is poorly assessed in the human resource management and organizational psychology literature. Therefore, the authors of this research expected a significant and positive relationship between job resources and job performance of vocational business educators in public universities in South-South Nigeria.

Hypothesis 3: Job resources will positively relate to job performance.

The Mediating Influence of Work Engagement

In this research, work engagement may act as a mediator variable between job resources and the job performance of vocational business educators in public universities in South-South Nigeria. The theoretical view of the mediating role of work engagement can be explained and understood from the social exchange theory (Blau, 1964; Emerson, 1976; Homans, 1958). This theory proposed



that when the employer and employees abide by exchange rules, they will have a more trusting and loyal relationship. This is because social exchange consists of the actions contingent on the rewarding reactions of others (for example, employer and employees) which over time provide for mutually and rewarding transactions and relationships. Accordingly, employees who are engaged on the job continue to enact or lend themselves fully on the job because of the continuation of favourable reciprocal exchanges. Employees who are provided with job enrichment and work environment may feel obliged to express themselves on the job as a repayment for the resources they receive from the organization. Employees who perceive that they receive unfavourable treatment from the organization are more likely to feel angry, vengeful and withdraw from the job. In line with the norms of reciprocity, employees who are dissatisfied are likely to reciprocate by exhibiting a deviant behaviour, such as, arriving at work late, withholding effort, taking longer breaks than allowed, and so on. Employees who are not engaged on the job may retaliate against their employer by behaving in ways that harm the organization.

Besides, the JD-R model has long proposed that work engagement is a potential mediating variable. Work engagement involves a motivational process in which it mediates the relationships between job resources and better job performance (Schaufeli & Bakker, 2010). Many scholars and authors have attempted to comprehend the antecedents and consequences of work engagement is a potential mediating variable, and can be seen in a number of research (Crawford, LePine & Rich, 2010; Demerouti & Cropanzano, 2010; Halbesleben, 2010; Christian, *et al.*, 2011; Bakker, *et al.*, 2014), which demonstrated progress in addressing this salient matter.

Guidance has long been provided by the JD-R model regarding the mediating influence of work engagement. Specifically, Schaufeli and Bakker (2010) indicated that as job resources foster growth, learning and development, it increases work engagement of employees. In turn, Bakker and Demerouti (2017) averred that employees will demonstrate better job performance. Empirical evidence on work engagement as a mediator in this process is also available. For instance, recent research found that work engagement showed partial mediation on the effects of job characteristics and perceived organizational support on numerous results, which include job performance (Ng & Chung, 2010; Kim, 2017; Saks, 2019). Thus, due to its motivational process, job resources have the potential to increase work engagement of employees. In turn, for the organization, this is associated with positive consequences (Schaufeli, Maassen, Bakker & Sixma, 2011).

Research has showed the mediating influence of work engagement in the interplay between job resources and job performance (Hakanen, Bakker & Jokisaari, 2011). The provision of job resources could enhance employees' ability to meet their basic needs that could lead to work engagement. This statement has been supported by some assumptions and theoretical research (see, Karatepe, 2013; Vincent-Höper, Muser & Janneck, 2012; Sulea *et al.*, 2012; Slatten & Mehmetoglu, 2011; Ng & Tay, 2010) which found that work engagement serves as a full mediator between two variables. A research regarding the influence of work engagement as a mediating variable is the one conducted by Karatepe (2013). This study was conducted among the full-time frontline employees in four- and five-star hotels and focused on the mediating effect of work engagement on the interplay between organizational politics and job performance, which showed a strong support for work engagement as a full mediating variable between organizational politics and job performance.

In the context of this research, work engagement is used as a mediator between job resources and job performance of vocational business educators in public universities in South-South Nigeria. It is therefore assumed in this research that vocational business educators who are energetic, enthusiastic, happy and proud in performing their jobs are more likely to continue their job activities and subsequently stay longer in their different universities. This assumption further explained how work engagement might mediate the relationships between job resources and the job performance of



vocational business educators in public universities in South-South Nigeria. Therefore, it is assumed in this research that job resources may positively influence job performance and this interplay can be mediated by the experiences of work engagement.

Hypothesis 4: Work engagement will positively mediate the relationship between job resources and job performance.

Method

Research Design

This research employed a quantitative survey research design to test the four hypotheses proposed. Quantitative survey research designs are useful in the early stages of research, such as in this study, in order to empirically testing the strength and direction of relationships among the research variables (Johnson, 2001). Therefore, quantitative type of designs could serve as the foundation upon which future experimental and quasi-experimental research is to be built.

Participants and Sampling Procedure

The participants were 142 full-time vocational business educators who worked in a public university in South-South Nigeria. Scholars and researchers (Chukwuendo & Igbinedion, 2014; Chukwuemeke & Igbinedion, 2021; Edokpolor & Oviawe, 2022a&b; Edokpolor, Otache & Osifo, 2022; Edokpolor *et al.*, 2022; Edokpolor *et al.*, 2023) recommended that a vocational educator-recruited participant is an appropriate data collection strategy because a vocational educator are expected to be involved in high-job situations. The convenience sampling methods were used to select 142 participants from 12 public universities in South-South Nigeria. A convenience sampling method can be employed if the participants are available to the authors as at the time the research is conducted (Creswell & Creswell, 2017; Creswell & Poth, 2018).

Research Measurement Scale

The job resources scale developed by Bakker (2014) was adapted and used to measure the participants' experiences of job resources (for example, colleague/HOD support (6 items), job autonomy (3 items), performance feedback (3 items) and career development opportunities (3 items). However, variety of skills utilization (4 items), a major construct of job resources was constructed by the authors. The responses to the job resources items were assessed on a 4-point Likert-type scale ranging from 1 (not at all) to 4 (always).

The work engagement scale developed by Rich, LePine and Crawford (2010), reflecting each of the work engagement sub-scales such as, cognitive engagement (6 items), emotional engagement (6 items) and physical engagement (4 items), originally developed by Kahn (1990) was adapted and used to measure the participants' experiences of work engagement. The responses to the work engagement items were assessed on a 4-point Likert-type scale ranging from 1 (not at all) to 4 (always).

The task performance (25 items), a major construct of job performance was constructed by the authors covering teaching, research and administration. The contextual performance (5 items), a major construct of job performance was also measured using a scale developed by Goodman and Svyantek (1999). The responses to the job performance items were assessed on a 4-point Likert-type scale ranging from 1 (not at all) to 4 (always).



Validation of Instrument

The data collection measurement scales were subjected to face and content validity by three experts, two in Business Education and one in Measurement and Evaluation. The face and content validity of the data collection measurement scales was done with respect to relevance, sentence structure and adequacy. The suggestions that were pointed out by these three experts were effected in the final copies of the data collection measurement scales and were reproduced to answer the research questions and test the research hypotheses at a 0.05 level of significance.

Reliability of Instrument

To establish the reliability, the internal consistency estimates were calculated using Cronbach’s alpha for the items selected to represent each of the variables (Brown, 2002). The coefficient alpha representing each of the variables can be found in Table 1.

Table 1: Variables, Items, and Measurement Scale Reliabilities

Variables and Items	Cronbach’s α
<p>Job Resources</p> <p>My work require me to utilize creativity/innovation skills. My work require me to utilize flexibility/adaptability skills. My work require me to utilize ICT literacy/numeracy skills. My work require me to utilize collaboration/teamwork skills. I freely ask my colleagues for help on my job. I count on my colleagues to support me where I encounter difficulties in my job. I feel valued by my colleagues and we collaborate effectively. My HOD show consideration for personal problems affecting my work. My HOD value me and readily supports me. My HOD use his/her influence to help me solve problems at work. I have control over how I carry out my work. I can independently manage available resources for my work. I am so hampered by guidelines and specifications that I hardly bring original ideas into my work. My work offers me opportunities to check on how well I am performing. Students’ ratings inform me on how good or bad my performance is. My HOD informs me whether he/she is satisfied with my performance. My work offers me the opportunities to acquire (learn) new skills. My work gives me opportunities to continually upgrade/update myself. My work offers me the possibility for increased income.</p>	<p>$\alpha = 0.95$</p>
<p>Work Engagement</p> <p>My mind is often full of ideas about my work. Wherever I am, things happen that often remind me of my work. My mind is fully engaged with my work. I rarely think about time when I am working. My thoughts are fully focused when thinking about my work. I give a lot of mental attention to my work. I feel very delighted about what I am doing whenever I am working.</p>	<p>$\alpha = 0.96$</p>



I am very eager to do my work.
I feel very happy when I am carrying out my responsibilities at work.
I feel very good about the work that I do.
I feel strong enthusiasm about my work.
I feel a sense of gratification with my work performance.
I have a great deal of stamina for my work.
I am often physically driven by my work.
I am frequently energized by my work.
I find my work to be physically invigorating.

Job Performance

$\alpha = 0.96$

...use PowerPoint for face-to-face lectures.
...use Skype for distance lectures.
...deliver lectures through YOU-TUBE.
...deliver lectures through WhatsApp.
...adopt video conferencing for lectures.
...use Microsoft office to produce lecture materials.
...adopt doodle for online lectures.
...use the internet to source for information when carrying out research.
...use anti-plagiarism software to check similarities index.
...use Microsoft Excel for coding research data.
...use software package to format referencing styles.
...use statistical package to analyze quantitative data.
...present research papers using PowerPoints slides.
...edit research papers using software packages.
...upload research papers on the internet using online research platforms.
...use software package to analyze qualitative research data.
...upload students' result online.
...course advice students through the internet.
...use LISTERV to reach many students at once.
...prepare students results using Microsoft office documents.
...use mobile phones to address official matters.
...use videoconferencing to address official matters.
...perform students' online admission/registration exercise.
...use multimedia resources for official matters.
...compute students' grade point average.
...voluntarily help colleagues to perform their job activities.
...voluntarily disclose illegal practices to individuals who are authorized to take action.
...voluntarily attend corporate functions such as award banquet.
...voluntarily put in extra effort to complete a given job activity.
...voluntarily settle dispute among colleagues in my workplace.

Procedure for Data Collection

The authors administered each of the survey instruments on vocational business educators (both lecturers and HODs) with the help of six research assistants who were briefed on the procedures to follow. The completion time for each survey instruments was roughly two weeks. Because this research examined vocational business educators job characteristic and work well-

being and the influence they may have on better behavioural outcome, the data for independent variables (job resources and work engagement) were collected first, while the data for dependent variable (job performance) was collected after one week later. The data for independent variables was self-reported, where information was collected from the vocational business educators (lecturers), while the data for dependent variable was alternate-reported, where information was collected from the HODs to avoid common method bias.

Data Analysis

The SPSS v. 23.0 and PROCESS Macro plugging for SPSS v. 3.4.1 by Hayes (2018) was used to analyze the data collected from the participants. Bivariate correlation was performed to answer the research questions. Linear regression was performed to test the hypotheses (the direct relationships/unmediated pathways). Bias corrected and accelerated (BCa) bootstrap was performed to test another hypothesis (the indirect relationship/mediated pathway). Decision rule for Bivariate correlation were based on a range of coefficient value (r) as recommended by Uzoagulu (2011) in the following order: Coefficient r -value between $\pm .8$ and ± 1.0 implying a very high correlation; $\pm .6$ and $\pm .8$ implying a high correlation; $\pm .4$ and $\pm .6$ implying a moderate correlation; $\pm .2$ and $\pm .4$ implying a low correlation; $\pm .0$ and $\pm .2$ implying a very low correlation; ± 1.0 implying a perfect correlation; and coefficient r -value of 0 implying a no correlation. When a coefficient r -value is negative, it is a negative correlation; implying that as one variable increases the other decreases. When a coefficient r -value is positive, it is a positive correlation implying that as one variable increases the other increases. Decision rule for linear regression was based on a probability value less than or equal to .05 implied significant (accept H_0) while a probability value greater than .05 implied not significant (reject H_0). Decision rule for BCa was based on any value of a confidence interval (lower limit and upper limit) that are within the same axis (not including zero) implied significant (accept H_0), while any value of a confidence interval (lower limit and upper limit) that are not within the same axis (including zero) implied not significant (reject H_0).

Result

Table 2: Bootstrapping and Bivariate Correlation between the Study Variables.

S/N	Pathways	5000 Resample Bootstrapping Iterations				95%CI	
		r	p	$Bias$	SE	LL	UL
1.	JR \rightarrow WE	.560**	.000	.002	.085	.382	.716
2.	WE \rightarrow JP	.835**	.000	.003	.024	.790	.885
3.	JR \rightarrow JP	.814**	.000	-.008	.066	.651	.907

Note. **. Correlation is significant at the 0.01 level (2-tailed), *. Correlation is significant at the 0.05 level (2-tailed), Unless otherwise noted, bootstrap results are based on 5000 bootstrap samples, $N = 142$, $p < 0.05$, JR = Job Resources, WE = Work Engagement, JP = Job Performance, CI = Confidence Interval.

Table 2 showed the correlation between job resources and work engagement of vocational business educators in public universities. The Table showed that the correlation between job resources and work engagement of vocational business educators in public universities is positively moderate ($r = .560$, $p < 0.05$). All in all, there exist a positively moderate correlation between job resources and work engagement of vocational business educators in public universities in South-South Nigeria. Table 1 also showed the data correlation between work engagement and job

performance of vocational business educators in public universities. The Table showed that the correlation between work engagement and job performance vocational business educators in public universities is positively high ($r = .835, p < 0.05$). All in all, there exist a positively high correlation between work engagement and job performance of vocational business educators in public universities in South-South Nigeria. Table 1 further showed the correlation between job resources and job performance of vocational business educators in public universities. The Table showed that the correlation between job resources and job performance of business educators is positively high ($r = .814, p < 0.05$). By and large, there exist a positively high correlation between job resources and job performance of vocational business educators in public universities in South-South Nigeria.

Table 3: Regression Estimates of the Direct Relationship between the Study Variables.

Pathways	SE Beta (β)	t	Bias	R ²	Adj. R ²	p	95% CI	
							LL	UL
JR → WE	.094 (.499)	6.805	-.009	.249	.243	.000	.483	.853
WE → JP	.163 (.611)	9.088	.000	.373	.368	.000	.662	1.300
JR → JP	.173 (.565)	8.077	-.017	.319	.315	.000	.897	1.583

Note. $N = 142, p < 0.05$, JR = Job Resources ($F=46.307$), WE = Work Engagement ($F=82.592$), JP = Job Performance ($F=65.243$), BCa = Bias-Corrected and Accelerated Estimates, CI = Confidence Interval.

Table 3 showed the coefficient of relationship between job resources and work engagement of vocational business educators in public universities. The Table showed the significant coefficients ($F = 46.307, \beta = .499, t = 6.805, p < 0.05$), which is also a confirmation of the results obtained. The adjusted r-square (.243) showed that 24.3% of the variation in work engagement is influenced by job resources. All in all, job resources were found to significantly influence work engagement of vocational business educators in public universities in South-South Nigeria. Table 1 also showed the coefficient of relationship between work engagement and job performance of vocational business educators in public universities. The Table showed the significant coefficients ($F = 82.592, \beta = .611, t = 9.088, p < 0.05$), which is also a confirmation of the results obtained. The adjusted r-square (.368) showed that 36.8% of the variation in job performance is influenced by work engagement. All in all, work engagement was found to significantly influence job performance of vocational business educators in public universities in South-South Nigeria. Table 1 further showed the coefficient of relationship between job resources and job performance of vocational business educators in public universities. The Table showed the significant coefficients ($F = 65.243, \beta = .565, t = 8.077, p < 0.05$), which is also a confirmation of the results obtained. The adjusted r-square (.315) showed that 31.5% of variation in job performance is influenced by job resources. By and large, job resources were found to significantly influence job performance of vocational business educators in public universities in South-South Nigeria. Hence, hypothesis 1 is accepted.

Table 4: BCa Estimates of the Indirect Relationship between the Study Variables.

Variable	Effects	Pathways	5000 Resample Bootstrap with BCa Estimates				
			Beta (β)	SE	p	95% CI	
						LL	UL
Job Resources	Total	JR → JP	1.294	.160	.000	.977	1.610
	Direct	JR → JP	.794	.165	.000	.469	1.120
	Indirect	JR → WE → JP	.500	.128	Sig.	.257	.756

Note. $N = 142$, $p < 0.05$, JR = Job Resources, WE = Work Engagement, JP = Job Performance, BCa = Bias-Corrected and Accelerated Estimates, CI = Confidence Interval.

Table 4 showed the regression on the mediating influence of work engagement on the relationship between job resources and job performance of vocational business educators in public universities. The Table showed that the specific indirect effect of job resources via work engagement is statistically significant. The total effect of job resources on job performance is found to be statistically significant ($\beta = 1.293$, $p < 0.05$, LLCI = .977, ULCI = 1.610). Similarly, the Table showed that the direct effect of job resources on job performance ($\beta = .794$, $p < 0.05$, LLCI = .469, ULCI = 1.120) is statistically significant. Since the specific indirect effect of job resources on job performance ($\beta = .500$, $p < .05$, LLCI = .257, ULCI = .756) via work engagement is statistically significant, work engagement is found to fully mediate the relationship. By and large, work engagement is found to significantly mediate the relationship between job resources and job performance of vocational business educators in public universities in South-South Nigeria. Hence, hypothesis 2 is accepted.

Discussion

Job Resources and Work Engagement

The results in Table 2 showed a positively moderate correlation between job resources and work engagement of vocational business educators in public universities in South-South Nigeria. The results of the corresponding hypothesis in Table 3 showed that job resources significantly influenced work engagement of vocational business educators in public universities, as job resources accounted for 24.3% of the variation in work engagement. Therefore, job resources were found to significantly influence work engagement of vocational business educators in universities in South-South Nigeria. This finding implied that when vocational business educators experience high job resources, they will equally experience high work engagement. This finding supported the research conducted by Demerouti, *et al.*, (2001) who found that job resources influenced work engagement of employees. The finding also concurred with the view of Scanlan and Still (2019) who argued that job resources involve an aspects of the job that provided support for employees and help to maintain work engagement.

Work Engagement and Job Performance

The results in Table 2 also showed a positively high correlation between work engagement and job performance of vocational business educators in public universities in South-South Nigeria. The results of the corresponding hypothesis in Table 3 showed that work engagement significantly influenced job performance of vocational business educators, as work engagement accounted for 36.8% of the variation in job performance. Therefore, work engagement was found to significantly



influence job performance of vocational business educators in public universities in South-South Nigeria. This finding implied that when vocational business educators are highly engaged on the job, they will equally perform better on the job. The finding aligned with the perceptions of Griffin, Neal and Parker (2007) who claim that employees who experience high work engagement, also experience a greater degree of job performance. The finding also agreed with the research of Bakker and Bal (2010) who found that engaged employees (or teachers) execute job performance better, indicating that engaged employees are willing to go the extra mile on the job. The finding also agreed with the research of Bakker, Demerouti and ten Brummelhuis (2012) and Demerouti and Cropanzano (2010) who found that employees who are engaged at work will equally perform better on the job. The finding also supported the recommendations of previous research by Christian *et al.*, (2011), Rich *et al.*, (2010) and Leiter and Bakker (2010) who recommended that the experience of high degrees of work engagement of employees enhances job performance. The finding also supported the assertions by Rana, Pant and Chopra (2019) who argued that employees who are engaged at work are characterized as been vigilant, more engrossed with their job and thus considering work engagement to be positively related to job performance. The finding also concurred with the research of Karatepe and Ngeche (2012) who found a significant relationship between work engagement and job performance of employees.

Job Resources and Job Performance

The findings in Table 2 also showed a positively high correlation between job resources and job performance of vocational business educators in public universities in South-South Nigeria. The results of the corresponding hypothesis in Table 3 showed that job resources significantly influenced job performance of vocational business educators, as job resources accounted for 31.5% of the variations in job performance. Therefore, job resources were found to significantly influence job performance of vocational business educators in universities in South-South, Nigeria. This finding implied that when business educators experience high job resources, they will equally experience better job performance. This finding supported the study of Min and Yong (2014) who found that job resources were positive influence of job performance. The finding also aligned with the perceptions of Nwanzu and Adams (2019) who acknowledged that healthy social relationship between supervisors (which are HODs within the context of this research) and employees (which are lecturers within the context of this research) and employees and employees are salient for job performance as they are indication of conducive and harmonious work environment which pave way for productive working behaviour. Furthermore, the finding of the study also supported the research of Jayaweera (2015) and Lankeshwara (2016) who found that job resources such as colleague/supervisor support have a significant relationship with job performance.

Work Engagement and its Mediating Role between Job Resources and Job Performance

The results in Table 4 showed that work engagement is a potential mediator in the relationship between job resources and job performance of vocational business educators. All in all, work engagement was found to significantly mediate in the relationship between job resources and job performance of vocational business educators in public universities in South-South Nigeria. This finding implied that a vocational business educator, who experience high job resources, will equally experience high work engagement which, in turn, will equally influence the zeal to perform better on the job. The findings supported the research of Schaufeli and Bakker (2004) who found that work engagement mediated the relationship between job resources and job performance. The findings also supported the views of Bakker *et al.*, (2014) who perceive job resources as the main drivers of work engagement as job resources will lead to better job performance. The findings also supported the



research of Shantz, Alfes, Truss and Soane (2013) who found that work engagement significantly mediated the relationship between job resources and job performance. The findings also supported the research of Kim (2017) who found that work engagement significantly mediate the relationship between job resources and job performance. The finding also supported the research of Dixit and Upadhyay (2021) who found and suggest that work engagement mediates the relationship between job resources and work-related behaviour. The findings also supported the research by Chung and Angeline (2010) who found that work engagement of staff significantly mediate the relationship between job resources and job performance of employees.

Conclusion

The research examined the relationship between job resources, work engagement and job performance of vocational business educators. It examined the influence of job resources on job performance of vocational business educators with work engagement as a mediating variable. Job resources and work engagement positively correlated with job performance of vocational business educators. Job resources and work engagement significantly related to job performance of vocational business educators. Work engagement mediated the relationship between job resources and job performance of vocational business educators. These imply that the creation of a resourceful working environment will make vocational business educators to be engage and perform better on the job. The influence of job resources on job performance of vocational business educators is caused by their work engagement. However, research need to be conducted in the future to establish whether job resources is a key managerial strategy to achieve better job performance via work engagement. Future research can be longitudinal or experimental so as to provide a better understanding because the measurement scale may have captured the surface of the actual issues. Longitudinal or experimental research can also cover a wide range of location and attract a robust number of participants.

Practical Implications

The study focused on the mediating influence of work engagement in the relationship between job resources and job performance of vocational business educators, which relatively represent a novel area that have not been empirically explored, especially in the context of vocationally business-oriented educators in public universities in South-South Nigeria. The research has indeed contributed to the JD-R theory by providing a framework that examined the mediating influence of work engagement in the relationship between job resources and job performance of vocational business educators in public universities. For instance, one of the assumption of the JD-R theory is the motivational process, which suggested that the working environment that is highly resourceful (where employees use variety of skills, provide help for and receive help from each other, execute the job with no control from superiors, receive feedback on the job done and seize opportunity for career advancement) have motivational potential that may provide opportunities for employees to be engage and perform better on the job. This implied that job resources were part of the motivational process that increase work engagement and better job performance of employees, including vocational business educators. Therefore, future research should deeply focus on these relationships, by investigating the different dimensions of job resources, work engagement and job performance of vocational business educators.

The findings of the research have also provided practical implications for university managers and administrators, as it can provide them with the information of how high work engagement and better job performance of staff can be fostered via increased job resources. University managers and administrators can sustain abundance of job resources by ensuring



adequate implementation of a resourceful working environment that will influence high work engagement and better job performance of staff. Therefore, a resourceful working environment should be carefully implemented in order for vocational business educators to continually experience high work engagement and better job performance. Devising a strategic means of implementing a resourceful working environment should be one of the mission and vision of the university managers and administrators.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. University administrators and managers should endeavour to devise strategic means to create a resourceful working environment as they will provide opportunity for vocational business educators to experience high work engagement and better job performance.
2. Government should endeavour to invest on the career development or advancement of vocational business educators as this will provide great opportunity for them to acquire variety of requisite skills and knowledge required to perform better on the job.
3. Vocational business educators should continually make effort to improve themselves by attending academic conferences, workshops and seminars as this will make them to be engaged on the job and optimally enhance their performance on the job.
4. Lecturers and Heads of Department should endeavour to provide support for their colleagues (co-workers) as this will help to reinforce or motivate them to be engaged on the job and optimally enhance their performance on the job.
5. University management and Heads of Department should endeavour to regularly provide feedback of the job performed by vocational business educators as this will make them to buckle up on their different areas of deficiencies.

References

- Adekiya, A. (2013). Perceived job insecurity and task performance: what aspect of performance is related to which facet of job insecurity. *Current Psychology*, Retrieved from <https://doi.org/10.1007/s12144-023-04408-4>
- Anjum A., Ming X., Siddiqi, A. F., & Rasool, S. F. (2018). An empirical study analyzing job productivity in toxic workplace environments. *International Journal of Environmental Research and Public Health*, *15*(5), 1035. Retrieved from <https://doi.org/10.3390/ijerph15051035>.
- Annisa, N. N., & Ginarti, C. (2023). Employee performance: Self-efficacy and locus of control. *International Journal of Social Sciences, Economics and Arts*, *12* (4), 200-206.
- Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, *20* (4), 265-269.
- Bakker, A. (2014). *The job demands-resources questionnaire*. Rotterdam, Netherlands: Erasmus University, 1-14.
- Bakker, A. B., & Bal, M. P. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology*, *83* (1), 189–206.
- Bakker, A.B., & Demerouti, E. (2014). Job demands-resources theory. In P. Y. Chen and Cooper, C.L. (Eds.), *Work and wellbeing: Wellbeing: A complete reference guide* (pp. 37-64). London: Wiley-Blackwell.
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, *22* (2), 273-285.



- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. I. (2014). Burnout and work engagement: The JD-R Approach. *Annual Review of Organizational Psychology and Organizational Behaviour*, 1 (1), 389–411.
- Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. (2023). Job demands–resources theory: Ten years later. *Annual Review of Organizational Psychology and Organizational Behaviour*, 10, 25-53. Retrieved from <https://www.annualreviews.org/doi/pdf/10.1146/annurev-orgpsych-120920-053933>
- Bakker, A. B., Demerouti, E., & ten Brummelhuis, L. L. (2012). Work engagement, performance, and active learning: The role of conscientiousness. *Journal of Vocational Behaviour*, 80, 555-564.
- Bakker, A. B., Rodríguez-Muñoz, A., & Sanz-Vergel, A. I. (2015). Modelling job crafting behaviours: Implications for work engagement. *Human Relations*, 34 (2), 1-21.
- Baldoni, J. (2013). *Employee engagement does more than boost productivity*. Retrieved from <https://hbr.org/2013/07/employee-engagement-does-more>
- Bang, H., & Reio, T. G., Jr. (2017). Examining the role of cynicism in the relationships between burnout and employee behaviour. *Journal of Work and Organizational Psychology* 33, 217–227.
- Bhat, M. A., & Tariq, S. (2022). Impact of job burnout on performance: A study among hospital employees of J&K, India. *BIMTECH Business Perspectives*, 1–17.
- Bieńkowska, A., & Tworek, K. (2020). Job performance model based on employees' dynamic capabilities (EDC). *Sustainability*, 12, 1-25.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: John Wiley.
- Brown, J. (2002). Training needs assessment: A must for developing an effective training program. *Public Personnel Management*, 31, 569-578. Retrieved from <http://dx.doi.org/10.1177/009102600203100412>
- Chiaburu, D. S., Peng, A. C., Oh, I.-S., Banks, G. C., & Lomeli, L. C. (2013). Antecedents and consequences of employee organizational cynicism: A meta-analysis. *Journal of Vocational Behaviour*, 83(2), 181–197. Retrieved from <https://doi.org/10.1016/j.jvb.2013.03.007>
- Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology*, 64 (1), 89–136.
- Chukwuedo, S. O., & Igbinedion, V. I. (2014). ICT competences and capacity building needs of technical and vocational education lecturers in Nigerian universities. *African Journal of Interdisciplinary Studies*, 7, 45-53.
- Chukwuemeke, H. E., & Igbinedion, V. I. (2021). Relationship between knowledge dissemination, learning self-efficacy and task performance of business educators. *NAU Journal of Technology & Vocational Education*, 6 (1), 13-21.
- Chung, N. G., & Angeline, T. (2010). Does work engagement mediate the relationship between job resources and job performance of employees? *African Journal of Business Management*, 4 (9), 1837-1843.
- Crawford, E. R., LePine, J. A., & Rich B. L. (2010). Linking job demands and resources to employee engagement and burnout: A theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95 (1), 834–848.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approach*. Thousand Oaks, CA: Sage Publications.
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage Publications.
- Cross, O. D. (2019). Effects of job stress on employee's performance. *International Journal of Business, Management and Social Research*, 06 (02), 375-382. Retrieved from <https://doi.org/10.18801/ijbmsr.060219.40>
- Del Líbano, M., Llorens, S., Salanova, M., & Schaufeli, W. (2012). About the dark and bright sides of self-efficacy: Workaholism and work engagement. *The Spanish Journal of Psychology*, 15 (2), 688-701.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands – resources model of burnout. *Journal of Applied Psychology*, 86 (2), 499–512.
- Demerouti, E., & Cropanzano, R. (2010). From thought to action: Employee work engagement and job performance. In A. B. Bakker and M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 147–163). New York: Psychology Press.



- Dixit, A., & Upadhyay, Y. (2021). Role of JD-R model in up ticking innovative work behaviour among higher education faculty. *RAUSP Management Journal*, 56 (2), 156-169.
- Edokpolor, J. E. (2019). Talent management strategies: A modern approach for developing entrepreneurial career and lifelong learning tasks among business education undergraduates. *International Journal of Arts and Technology Education*, 11 (1), 18-30. Retrieved from <https://artseducation.unn.edu.ng/wp-content/uploads/sites/154/2018/03/INJA-Journal.pdf>
- Edokpolor, J. E., Chukwuemeke, H. E., & Osifo, K. E. (2022). Knowledge management and job performance of business studies teachers: The mediating effect of work engagement. *Management Review: An International Journal*, 17 (1), 27-64. Retrieved from <https://connect.informs.org/koreachapter/management-journal/journal-information>
- Edokpolor, J. E., & Imafidon, A. (2017). Effectiveness of public-private partnership in the management of technical and vocational education and training. *Education Policy, Management and Quality*, 9 (1), 20-32. Retrieved from <http://d.researchbib.com/f/Ono2SdnF5hMKDiLKW0nJAfMKZiZwNkAl81ZGZgZGHjAGV4AmxmAF5jMTL.pdf>
- Edokpolor, J. E., & Imafidon, A. (2019). Public-private-civil society partnership: A gateway to ensuring good governance practices of vocational education in South-South Nigerian Federal Universities. *Journal of Technical Education and Training*, 11 (3), 121–135. Retrieved from <https://publisher.uthm.edu.my/ojs/index.php/JTET/article/view/3287>
- Edokpolor, J. E., & Imeokparia, P. (2022). Job resources-engagement relationship among business educators in universities in south-south, Nigeria. *Benin Journal of Educational Studies*, 28 (1), 101-112. Retrieved from <https://beninjes.com/index.php/bjes/article/view/102/100>
- Edokpolor, J. E., Imeokparia, P. O., & Asemota, G. O. (2023). Job resources and job self-efficacy of vocational business educators: Evidence from public universities in Nigeria. *International Business Education Journal*, 16 (1), 50–70. Retrieved from <https://doi.org/10.37134/ibej.Vol16.1.5.2023>
- Edokpolor, J. E., Imeokparia, P., & Ediagbonya, K. (2022). Exploring the relationship between job demand and work burnout among business teacher educators in public universities. *Multidisciplinary Journal of Science, Technology and Vocational Education*, 10 (1), 34 – 45. Retrieved from <http://www.mjosteve.com/index.php>
- Edokpolor, J. E., Imeokparia, P. O., & Egbri, J. N. (2023). Revisiting the relationships between working environment and vocational business educators' behavioural outcomes: Evidence from public universities in South-South Geopolitical Zone of Nigeria. *AAU Journal of Business Educators*, 3 (1). 1-15. Retrieved from <https://aaujbe.com.ng/index/index.php/aaujbe/article/view/16>
- Edokpolor, J. E., Legg-Jack, & Imeokparia, P. (2022). Exploring the relationship between work burnout and job performance of vocational education lecturers in universities in Nigeria. *InSight: Jurnal Ilmiah Psikologi*, 24 (2), 1-13. Retrieved from <https://ejournal.mercubuana-yogya.ac.id/index.php/psikologi/index>
- Edokpolor, J. E., & Muritala, T. A. (2018). Developing entrepreneurial skills and lifelong learning for career self-efficacy among business education students in Federal Universities in south-south, Nigeria. *International Journal of Educational Benchmark*, 9 (2), 61-77. Retrieved from <http://benchmarkjournals.com/wp-content/uploads/2018/03/Developing-Entrepreneurial-Skills-and-Lifelong-Learning-for-Career-Self-Efficacy-among-Business-Education-Students-in-Federal-Universities-in-South-South-Nigeria.pdf>
- Edokpolor, J. E. & Oduma, C. (2018). Repositioning business education programme for post-oil boom economy. *International Journal of Vocational and Technical Education*, 10 (2), 14-23. Retrieved from <https://academicjournals.org/journal/IJVTE/article-full-text-pdf/0AF70FF56069>
- Edokpolor, J. E., & Omiunu, S. E. (2017). Role of career development services in developing students lifelong learning self-efficacy: Vocational and adult education lecturers' perceptions. *Baltic Journal of Career Education and Management*, 5 (1), 30-45.



- Edokpolor, J. E., Otache, I., & Osifo, K. E. (2022). Work Self-Efficacy and Engagement of Vocational Business Education Lecturers. *Journal of Technical Education and Training (JTET)*, 14 (3), 112-124. Retrieved from <https://publisher.uthm.edu.my/ojs/index.php/JTET/article/view/11646/5497>
- Edokpolor, J. E., & Oviawe, J. I. (2022a). The relationship between job demand and job performance among vocational teacher educators in higher education institutions in Nigeria. *Port Harcourt Journal of Educational Studies*, 7 (2), 371-380. Retrieved from <https://phajournal-uniport.org/wp-content/uploads/2023/02/8.-THE-RELATIONSHIP-BETWEEN-JOB-DEMAND-AND-JOB-PERFORMANCE-AMONG-VOCATIONAL.pdf>
- Edokpolor, J. E., & Oviawe, J. I. (2022b). Job resources and prosocial organizational performance of technical and vocational education and training lecturers in universities in Nigeria. *Rivers State University Journal of Education*, 25 (2), 129-142. Retrieved from <https://rsujoe.com.ng/index.php/joe/article/view/135/107>
- Edokpolor, J. E., & Owenvbiugie, R. O. (2017). Business education in Nigeria: Issues, challenges and way forward for national development. *Journal of Collaborative Research and Development*, 5 (1), 150-161.
- Edokpolor, J. E., & Owenvbiugie, R. O. (2022). Relationship between work engagement and job performance of vocational teacher educators in higher education institutions in Nigeria. In M. N. Amutabi & L. Hamasi (Eds.). *Annals of African development* (pp. 252-269). Centre for Democracy, Research and Development (CEDRED) publications, Nairobi, Kenya (Book 5).
- Emerson, R. M. (1976). Social exchange theory. *Annual Review of Sociology*, 2 (1), 335-362.
- Fernandez de Henestrosa, M., Sischka, P.E., & Steffgen, G. (2023). Examining the challenge hindrance-threat distinction of job demands alongside job resources. *Frontiers of Psychology*, 14. Retrieved from doi: 10.3389/fpsyg.2023.1011815
- Gil-Beltrán, E., Llorens, S., & Salanova, M. (2020). Employees' physical exercise, resources, engagement, and performance: A cross-sectional study from HERO model. *Journal of Work and Organizational Psychology*, 36 (1), 39-47.
- Goodman, S. A., & Svyantek, D. J. (1999). Person-organization fit and contextual performance: Do share values matter. *Journal of Vocational Behaviour*, 55 (1), 254-275.
- Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behaviour in uncertain and interdependent contexts. *Academy of Management Journal*, 50, 327-347.
- Hackman, J. R., & Oldham, G. R. (1980). *Work redesign*. Reading, MA: Addison-Wesley
- Hakanen, J. J., Bakker, A. B., & Jokisaari, M. (2011). A 35-year follow-up study on burnout among Finnish employees. *Journal of Occupational Health Psychology*, 16 (1), 345-360.
- Halbesleben, J. R. B. (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources and consequences. In A. B. Bakker and M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 102-117). New York, NY: Psychology Press.
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*, 2nd Ed. New York, NY: Guilford Press.
- Hidayat, R., & Panjaitan, S. (2022). Effect of self-efficacy, talent management and continuous improvement on employee performance. *The Management journal of Binaniaga*, 7 (2), 229-238.
- Igbinedion, V. I., Edokpolor, J. E., & Oyenuga, A. O. (2015). Trends toward a closer integration of vocational education and career guidance in Nigeria. *The Vocational and Applied Science Journal*, 12, 48-63.
- Ile, C. M., & Edokpolor, J. E. (2022). Work self-efficacy and job performance of business educators in public universities. *InSight: Jurnal Ilmiah Psikologi*, 24 (1), 1-13. Retrieved from <https://ejurnal.mercubuana-yogya.ac.id/index.php/psikologi/index>
- Inayat, W., & Khan, M. J. (2023). A study of job satisfaction and its effect on the performance of employees working in private sector organizations, Peshawar. *Education Research International*, 9, 1-9. Retrieved from <https://doi.org/10.1155/2021/1751495>
- Jaradat, S. (2020). Job dissatisfaction and its impact on work results innovative food. *Science & Emerging Technologies*, 6 (6).



- Jayaweera, T. (2015). Impact of work environmental factors on job performance, mediating role of work motivation: A study of hotel sector in England. *International Journal of Business and Management*, 10, 271-278.
Retrieved from <https://doi.org/10.5539/ijbm.v10n3p271>
- Johnson, B. (2001). Toward a new classification of nonexperimental research. *Educational Researcher*, 30, 3–13. Retrieved from <http://dx.doi.org/10.3102/0013189X030002003>
- Jumaharta, N. T., & Irbayuni, S. (2023). The effect of self-efficacy and locus of control on job performance Conec World Surabaya Startup Employee. *Indonesian Journal of Business Analytics*, 3 (3), 637-646.
- Kanapathipillai, K., Shaari, A. B., & Mahbob, N. N. (2021). The influence of self-efficacy on the job performance of employees in the online retail sector in Malaysia – The mediating effect of innovative behaviour. *The European Journal of Human Resource Management Studies*, 5(3), 85-111.
- Karatepe, O. M. (2013). High-performance work practices and hotel employee performance: The mediation of work engagement. *International Journal of Hospitality Management*, 32 (1), 132-140.
- Karatepe, O. M., Beirami, E., Bouzari, M., & Safavi, H. P. (2014). Does work engagement mediate the effects of challenge stressors on job outcomes? Evidence from the hotel industry. *International Journal of Hospitality Management*, 36, 14-22. Retrieved from <https://doi.org/10.1016/j.ijhm.2013.08.003>
- Khan, W.A. (1990). Psychological Conditions of Personal Engagement and Disengagement of Work. *Academy of Management Journal*, 33, 692-724.
Retrieved from <http://dx.doi.org/10.2307/256287>
- Kim, W. (2017). Examining mediation effects of work engagement among job resources, job performance, and turnover intention. *Performance Improvement Quarterly*, 29(4), 407-425.
- Kim, W., Kolb, J. A., & Kim, T. (2013). The relationship between work engagement and performance: A review of empirical literature and a proposed research agenda. *Human Resource Development Review* 12(3):248-276. Retrieved from <https://doi.org/10.1177/1534484312461635>
- Kumari, N. (2011). Job satisfaction of the employees at the workplace. *European Journal of Business and Management*, 3 (4), 11-30. Retrieved from <https://core.ac.uk/download/pdf/234624044.pdf>
- Kumari, G., & Pandey, K. M. (2011). Job satisfaction in public sector and private sector: A comparison. *International Journal of Innovation, Management and Technology*, 2, 222-228.
- Lankeshwara, P. (2016). A study on the impact of workplace environment on employee's performance: with reference to the Brandix Intimate Apparel–Awissawella. *International Journal of Multidisciplinary Studies*, 3 (1) 46-57.
- Leiter, M. P., & Bakker, A. B. (2010). Work engagement: Introduction. In Bakker, A. B. and Leiter, M. P. (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 1-9). Hove, Psychology Press.
- Lizano, E. L. (2015). Examining the impact of job burnout on the health and well-being of human service workers: A systematic review and synthesis. *Human Service Organizations: Management, Leadership & Governance*, 39, 167–181. Retrieved from <https://www.tandfonline.com/doi/epdf/10.1080/23303131.2015.1014122?needAccess=true>
- Mäkikangas, A., Bakker, A.B., Aunola, K., & Demerouti, E. (2010). Job resources and flow at work: Modeling the relationship via latent growth curve and mixture model methodology. *Journal of Occupational and Organizational Psychology*, 83 (2), 795-814.
- Maslach, C., & Leiter, M.P. (2016). Understanding the burnout experience: recent research and its implications for psychiatry. *World Psychiatry*, 15(2), 103-111. Retrieved from <https://doi.org/doi:10.1002/wps.20311>.
- Matilu, C. M., & K'Obonyo, P. (2018). The relationship between job characteristics and employee performance: A review. *International Journal of Business & Law Research*, 6 (3), 44-59.
- Naidoo-Chetty M., & du Plessis, M (2021). Job demands and job resources of academics in higher education. *Frontiers of Psychology*, 12. Retrieved from <https://doi.org/doi:10.3389/fpsyg.2021.631171>
- Ng, G., & Chung, T. (2010). Does work engagement mediate the relationship between job resources and job performance of employees? *African Journal of Business Management*, 4(9), 1837-1843.
- Ng, G. C., & Tay, A. (2010). Does work engagement mediate the relationship between job resources and job performance of employees? *African Journal of Business Management*, 4 (9), 1837-1843.



- Nwanzu, C. L., & Adams, B. (2019). Examining moderating role of age, gender, and marital status in the relationships between perceived organizational support and employee performance. *Nigeria Journal of Management Sciences*, 8 (1), 198-210.
- Quantum Workplace (nd). *What is employee engagement? What, why, and how to improve it*. Retrieved from <https://www.quantumworkplace.com/future-of-work/what-is-employee-engagement-definition>
- Rahmizal, M., & Dewi, R. S. (2022). The effect of self-efficacy and job satisfaction on employee performance in employees education and culture office south coast district. *Bina Bangsa International Journal of Business and Management*, 2 (1), 68-78.
- Rana, S., Pant, D., & Chopra, P. (2019). Work engagement and individual work performance: research findings and an agenda for employee relationships. *Journal of Emerging Technologies and Innovative Research* 6 (5), 17-32.
- Reina-Tamayo, A. M., Bakker, A. B., & Derks, D. (2017). Episodic demands, resources, and engagement. *Journal of Personnel Psychology*, 16 (3), 125-136.
- Rich, B. L., Lepine, J. A., & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53 (3), 617-635.
- Saks, A.M. (2019). Antecedents and consequences of employee engagement revisited. *Journal of Organizational Effectiveness: People and Performance*, 6 (1), 19-38. Retrieved from <https://doi.org/10.1108/JOEPP-06-2018-0034>
- Sastre-Morcillo, P., Blanco-Encomienda, F. J., & Latorre-Medina, M. J. (2018). Analysis of the factors influencing job burnout: Empirical evidence from Spain. *Pertanika Journal of Social Sciences & Humanities, Universiti Putra Malaysia*, 26 (4), 2211-2227.
- Sante, D. R. L., Eaton, A. A., & Viswesvaran, C. (2021). How contextual performance influences perceptions of personality and leadership potential. *Journal of Work and Organizational Psychology*, 37 (2), 93-106.
- Saragih, S. (2011). The effects of job autonomy on work outcomes: Self-efficacy as an intervening variable. *International Research Journal of Business Studies*, 4 (3), 203-215.
- Saricam, H., & Sakiz, H. (2014). Burnout and teacher self-efficacy among teachers working in special education institutions in Turkey. *Educational Studies*, 40 (4), 423-437.
- Scanlan, J. N., & Still, M. (2019). Relationships between burnout, turnover intention, job satisfaction, job demands and job resources for mental health personnel in an Australian mental health service. *BMC Health Services Research*, 19, 1-11. Retrieved from <https://doi.org/10.1186/s12913-018-3841-z>
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behaviour*, 25, 293-315.
- Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: bringing clarity to the concept. In A. B. Bakker and M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 10-24). New York, NY: Psychology Press.
- Schaufeli, W. B., Maassen, G. H., Bakker, A. B., & Sixma, H. J. (2011). Stability and change in burnout: A 10-year follow-up study among primary care physicians. *Journal of Occupational and Organizational Psychology*, 84 (2), 248-267.
- Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the job demands-resources model: Implications for improving work and health. In G. F. Bauer and O. Hammig (Eds.), *Bridging occupational, organizational and public health: A transdisciplinary approach* (pp. 43-68). Dordrecht, Netherlands: Springer.
- Schilbach, M., Baethge, A., & Rigotti, T. (2021). Do challenge and hindrance job demands prepare employees to demonstrate resilience? *Journal of Occupational Health Psychology*, 26(3), 155-174. Retrieved from <https://doi.org/10.1037/ocp0000282>
- Shantz, A., Alfes, K., Truss, C., & Soane, E. (2013). The role of employee engagement in the relationship between job design and task performance, citizenship and deviant behaviours. *International Journal of Human Resource Management*, 24(13), 2608-2627. Retrieved from <https://doi.org/10.1080/09585192.2012.744334>
- Sheppard, G. (2016). Work-Life Balance Programs to Improve Employee Performance. Walden Dissertations and Doctoral Studies Collection Retrieved from



- <https://scholarworks.waldenu.edu/cgi/viewcontent.cgi?article=3161&context=dissertations&httpsredir=1&referer=>
- Slåtten, T., & Mehmetoglu, M. (2011) Antecedents and effects of engaged frontline employees: A study from the hospitality industry. *Managing Service Quality* 21 (1), 88–107.
- Sulea, C., Virga, D., Maricutoiu, L. P., Schaufeli, W., Zaborila Dumitru, C., & Sava, F. A. (2012). Work engagement as mediator between job characteristics and positive and negative extra-role behaviours. *Career Development International*, 17 (3), 188–207.
- Tadić, M., Bakker, A. B., & Oerlemans, W. G. M. (2015). Challenge versus hindrance job demands and well-being: A diary study on the moderating role of job resources. *Journal of Occupational and Organizational Psychology*, 88(4), 702–725. Retrieved from <https://doi.org/10.1111/joop.12094>
- Tadić, M., Oerlemans, W. G. M., & Bakker, A. B. (2014). Challenge versus hindrance job demands and well-being: A diary study on the moderating role of job resources. *Journal of Occupational and Organizational Psychology*, 88 (4), 1-24.
- Utami, C., & Mujanah, S. (2023). *The effect of self-efficacy, self-leadership, and work ethic on employee performance in manufacturing companies*. A paper delivered in International Conference on Advance & Scientific Innovation, KnE Life Sciences, pages 947–957. Retrieved from <https://doi.org/10.18502/kss.v8i9.13408>
- Uzoagulu, A. E. (2011). *Practical guide to writing research project report in tertiary institutions*. Enugu: Cheston Ltd.
- Van den Broeck, A., Van Ruysseveldt, J., Vanbelle, E., & De Witte, H. (2013). The job demands–resources model: Overview and suggestions for future research. In A. B. Bakker, A.B. (Ed.). *Advances in positive organizational psychology (Advances in Positive Organizational Psychology, Vol. 1)*, Emerald Group Publishing Limited, Leeds, pp. 83-105. Retrieved from [https://doi.org/10.1108/S2046-410X\(2013\)00000001007](https://doi.org/10.1108/S2046-410X(2013)00000001007)
- Van der Heijden, B. I. J. M., & Bakker, A. B. (2011). Toward a mediation model of employability enhancement: A study of employee-supervisor pairs in the building sector. *Career Development Quarterly*, 59 (3), 232-248.
- Vincent-Höper, S., Muser, C., & Janneck, M. (2012), Transformational leadership, work engagement, and occupational success. *Career Development International*, 17 (7), 663-682.
- Wijayana, T.T., Rahayu, M.K.P., & Wahyuningsih, S.H. (2022). The influence of self-efficacy on performance with innovation work behaviour as an intervening variable (Case study on PT. Indah Kiat employee). *Economics and Business Quarterly Reviews*, 5(3), 166-177.
- Wood, J., Oh, J., Park, J., & Kim, W. (2020). The relationship between work engagement and work–life balance in organizations: A review of the empirical research. *Human Resource Development Review*, 1–23. Retrieved from <https://core.ac.uk/download/pdf/327045828.pdf>
- Wood, S., Veldhoven, M. V., Croon, M., & deMenezes, L. M. (2012). Enriched job design, high involvement management and organizational performance: The mediating roles of job satisfaction and well-being. *Human Relations*, 65 (4), 1–27.
- Yao J, Qiu X, Yang L, Han X., & Li Y (2022). The relationship between work engagement and job performance: Psychological capital as a moderating factor. *Frontiers of Psychology*, 13. Retrieved from <https://doi.org/10.3389/fpsyg.2022.72913>.
- Yean, T. F., Johari, J., Yahya, K. K., & Chin, T. L. (2022). Determinants of job dissatisfaction and its impact on the counterproductive work behaviour of university staff. *Sage Open*, 1–11. Retrieved from <https://doi.org/10.1177/21582440221123289> journals.sagepub.com/home/sgo
- Zafar-Uz-Zaman, A., Lou, F., Muhammad, F. J., & Arslan, R. (2014). Job characteristics model and job satisfaction. *International Journal of Education and Research*, 2 (11), 241-262.