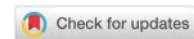


# THE MEDIATING EFFECT OF INNOVATIVE WORK BEHAVIOUR ON THE ASSOCIATION BETWEEN WORK-RELATED STRESS AND JOB PERFORMANCE OF AGRICULTURE RESEARCHERS

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**Abstract:** Employees who demonstrate Innovative Behaviour in the workplace are often more adaptable and this helps mitigate the impact of Work-Related Stress and enhances Job Performance. The study assessed the mediating effect of Innovative Behaviour on Work-Related Stress and job performance of agriculture researchers in Southwest, Nigeria. A simple random sampling technique was used to select Two Hundred and Sixty-One (261) agriculture researchers for the study. Results indicate that 52.2% of the researchers were male, and 59.4% were married, with an average age of 43 years and 10 years of experience. Increased workload (Weighted Mean Score = 264.3) and poor working conditions (WMS = 248.1) were the predominant Work-Related Stress in the study area. The hierarchical regression analysis revealed a significant ( $p < 0.05$ ) relationship between Work-Related Stress and job performance ( $b = 5.38$ ,  $p < 0.01$ ). Also, In-B was significant ( $b = 0.16$ ,  $p < 0.05$ ) to job performance. The study concluded that despite the prevalence and the influence of Work-Related Stress on job performance, Innovative Behaviour which serves as a mediating variable helped mitigate the impact of Work-Related Stress as employees approach their task in different ways, reducing the likelihood of feeling overwhelmed. The study recommended continuous learning and skill development to enhance researchers' capabilities to cope with job demands and adapt to changes in the organization.

**Keywords:** Innovative behavior, stress, job performance, Agriculture Researchers

**Field:** Humanities

## 1. INTRODUCTION

Work-related stress is an inescapable aspect of employees' daily activities and its presence within the organization, in particular, poses a formidable obstacle to many employees in carrying out their responsibilities (Amankwah, 2023) and also causes problems for employees and the organization (Wang et al., 2022). Stress is proclaimed to be a common factor that employees all across the world experience regularly. It is the deadliest silent killer of an employee, particularly during times of depression (Syed et al., 2012). Stressed employees are more likely to be ill, unmotivated, underproductive, and insecure at work, hence a reduction in their job performance (Josh and Goyal 2013).

According to Bui, et al (2021), the relationship between work-related stress and job performance is bidirectional, perceived pressure can be useful to keep employees alert, motivated, and able to work, but when it exceeds a certain threshold which varies among employees, it becomes excessive, causing stress. Therefore, work-related such as poor work conditions, excessive workload, unclear work schedules, long working hours, and lack of management support among others can be mitigated by working innovatively in the workplace (Karam and Kovess-Masfety 2022). According to Kmiecik (2020), innovative workplace behaviour is a stage of behaviour to intentionally create, introduce, and implement new ideas within the scope of work roles, groups, or organizations. It is an important variable in resolving work-related stress and enhancing job performance. In addition, innovative behavior fosters proactive problem-solving, which can create a more positive work environment. By encouraging new ideas and approaches, employees may feel a greater sense of autonomy and control, which can help alleviate the stress associated with rigid or unyielding work structures. The study, therefore, assessed the mediating effect of innovative work behavior on the relationship between work-related stress and job performance of agriculture researchers in Southwest, Nigeria.

## 2. MATERIAL AND METHOD

This study was conducted in three (3) selected agricultural research institutes namely Forestry Research Institutes of Nigeria (FRIN), Institutes of Agricultural Research & Training (IAR&T), and National Horticultural Research Institutes (NIHORT). The research institutes were purposively selected based on

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their agricultural-related mandate, and being a federal-owned research institutes domiciled in Southwest, Nigeria. A simple selection of two hundred, and sixty-one (261) respondents was made (93 at FRIN, 98 from IAR&T, and 70 from NIHORT) and the total retrieved percentage of the questionnaire was 91.9% (n=261; N=285). Since over 75.0% response rate was recorded, the nonresponse mistake is not a problem to the study's correctness. A validated and pre-tested instrument was used to collect information from the respondents. The age of the respondents and years of experience at work was determined by collecting the actual numbers in years; gender and marital status were measured at the nominal while educational status was measured at the ordinal level. An items scale developed by Frantz and Holmgren (2019) was used to measure the causes of work-related stress. Fourteen-item construct of innovative work behavior by Jeroen and Deanne (2010) was adapted while job performance was measured using a 15-item scale developed by Sarasvathy (2013) and adapted by Oose et al., (2022).

The mediational analysis was achieved using the hierarchical regression analytical technique. A four-step procedure by Preacher and Leonardelli (2001) was adopted to test for the mediation. In stage one, the predictor should significantly relate to the mediator, in the second stage, there should be a significant relationship between the predictor and criterion in the absence of the mediator while the mediator should have a significant relationship with the criterion in stage three and finally, the magnitude of relationship between predictor and criterion should become non-significant or reduced upon the inclusion of mediator to the model to provide evidence for full or partial mediation. The objectives were ascertained using frequency, percentage values, and Mean Score (i.e. weighted). The significant difference (that is, the Pearson value) was determined at 5% or 1% significant level.

### 3. RESULTS AND DISCUSSION

The mean age of the respondents was 42 years with 37.2% of them within the ages of less than or equal to 30 years while 34.5% of the respondents were within the ages of 31 and 40 years (Table 1). This implies that agricultural research institutes in Nigeria are predominantly occupied with middle-aged employees between the ages of 40 and 45. It also connotes that these employees are young, youthful at heart, and energetic. It is expected that with this set of employees, they will bring several benefits to the organization. Their fresh perspectives and familiarity with the latest technology can infuse new energy and creativity into the workplace. Additionally, middle-aged employees are eager to learn and take on new challenges, which drives innovative behavior adaptable to workplace-related stress. This finding aligns with the earlier findings of Oose et al., (2022) who noted that the age range of agro-researchers is between 35 and 60 years and this has influence on their level of job performance.

Table 1: Respondents' Characteristics (n= 261)

<b>Items</b>	<b>Frequency/Percentages/MeanValue</b>
1. Age in Years	Less than or equal to 40years 97(37.2%); 41-50years 90(34.5%); 42 years
2. Gender	Male 144(59.0%); Female 117(41.0%)
3. Marital Status	Married 155(59.4%); Single 97(37.2%)
4. Educational Status	First Degree 113(43.3%), Master Degree 32(12.1%)
5. Work Experience	Less than or equal to 10years; 188(72.0), Mean= 10.1years

Source: Data, 2024

Figure 2 shows the causes of work-related stress identified in the study area. Results revealed that increased workload (Weighted Mean Score (WMS) = 251.6), poor working conditions (WMS=234.8), and unclear work schedule (WMS=233.5) were identified as the major causes of work-related stress. This implies that increased workload experienced by the employees can significantly impact their stress level and hence affect job performance. Therefore, research institutes must carefully manage workloads and provide support measures for employees with heavy workloads to foster their productivity and job performance. This is supported by Thornicroft (2022) and Weigl et al., (2021) noted that excessive workloads represent a source of stress for workers and can negatively influence employees' health and job performance.

Table 2: Causes of Work-Related Stress (n= 261)

Variables	Always	Occasionally	Seldomly	Never	WMS	Rank
1. Increased Workload	44(16.9)	86(33.0)	93(35.2)	38(14.6)	251.6	1 <sup>st</sup>
2. Poor Working Conditions	41(15.7)	76(29.1)	77(29.5)	67(25.7)	234.8	2 <sup>nd</sup>
3. Unclear Work Schedule	26(10.0)	79(30.3)	72(27.6)	84(32.2)	233.5	3 <sup>rd</sup>
4. Role Ambiguity	30(11.5)	77(29.5)	102(39.1)	52(19.9)	232.6	4 <sup>th</sup>
5. Long Hour Work	32(12.3)	73(28.0)	102(39.1)	54(20.7)	232.1	5 <sup>th</sup>
6. Tight Deadlines	29(11.1)	71(27.2)	89(34.1)	72(27.6)	221.8	6 <sup>th</sup>
7. Work-Family Interference	36(13.8)	49(18.8)	70(26.8)	106(40.6)	205.8	7 <sup>th</sup>

Source: Data, 2024

The relationship between work-related stress and job performance mediated by innovative work behaviour (Table 3). In step 1 of the model, employees' biographies such as age, gender, marital status, educational status and years of experience were factored into the model to act as control variables and a significant association existed between marital status ( $b = .01$ ,  $p < .05$ ), work experience ( $b = .008$ ,  $p < .05$ ) and job performance. By this result it means that marital status and work experience of the employees has influence on their job performance. It then connotes that older respondents in the institute may exhibit better job performance than the newly recruited ones. Therefore, the findings created a link between workplace gender, years of experience, and job performance.

WR-S was entered into the model in step 2 and was negative and significantly related ( $b = -.09$ ,  $p < .01$ ) to job performance. Likewise, in step 3, innovative work behaviour was significantly related ( $b = .15$ ,  $p < .02$ ) to job performance. The third mediation condition was fulfilled when work-related stress controlled the significant relations between innovative work behavior and job performance. However, when innovative behavior was added to the model there existed evidence of partial mediation provided by the non-disappearance of a significant relationship between work-related stress ( $b = 5.38$ ,  $p < .01$ ), and job performance. Thus, the fourth mediation requirement was met, which aligns with Preacher and Leonardelli (2001). The study examines the mediating effect of innovative behaviour on the relationship between work-related stress and job performance. Findings are generally in tandem with earlier studies in the organizational dynamic theory. The finding implies that the inability of the employees to manage excessively increased workload, poor work conditions, and in-ability to clarify work schedules led to the stress experienced in the workplace. This agreed with the findings of Montaner et al., (2022), Ehring (2021), Luton et al., (2021) & West et al., (2021) that work-related stress develops when employees is unable to cope with work demands.

In addition, innovative work behavior mediates the relationship between work-related stress and job performance. The mediating role of innovative work behavior to work-related stress and job performance is supported in the literature by Asurakkody and Kim (2020) and Adam, (2022). This is expected because innovativeness at work helps in resolving workplace stress and enhances job performance. Employees who exhibit innovation at work are more creative in providing solutions to work-related stress and approach work in different ways. Employees with a high level of innovative behaviour embrace continuous learning and capacity development which can enhance employees' capability to cope with pressing job demands. Periodic on-the-job growth can lead to effective ways of managing work-related stress, ultimately boosting overall job performance. Therefore, encouraging innovative work behaviour among employees can effectively address work-related stress and enhance job performance among the workforce.

Table 3: Regression analysis (hierarchical) of In-B and PW-S to Job Performance

Regression steps	Model I			Model II			Model III		
	B	t-values	Sig	B	t-values	sig	b	t-values	sig
Step I									
1. Age in years	-.004	-.67	.50	-.003	.52	.59	.003	-.50	.61
2. Gender	.06	.96	.33	.05	.85	.39	.05	.84	.39
3. Marital Status	.01	.26	.02**	.04	.80	.42	.04	.81	.41
4. Education Status	.04	1.44	.15	.02	.01	.50	.02	1.60	.31
5. Experience	.008	1.06	.005*	.005	.72	.31	.005	.71	.47
Step II: Predictors									
6. WR-S				-.09	5.99	.001*	-.01	5.38	.001*
Step III: Mediator									
7. In-B							.16	.15	.02*
R	.59			.41			.41		
R <sup>2</sup>	.02			.17			.17		
ΔR <sup>2</sup>	.01			.14			.14		
F	.04			6.91*			5.89*		
df	5/261			6/261			7/261		

5% = \* n=261; Perceived Work-Related Stress (PW-S); Innovative Work Behaviour (In-B)  
Source: Data, 2024

#### 4. CONCLUSION AND RECOMMENDATIONS

The study concluded that increased workload and poor work conditions were the major identified causes of work-related stress in Nigerian research institutes. The study also concluded that work-related stress has a negative effect on employees' performance, hence it decreases overall job performance. Also, innovative work behaviour fostered a mediating effect between work-related stress and job performance, this aided the management of stress in the workplace and improved employees' job performance. The study recommends a continuous learning and skill development to enhance employees' capabilities to cope with job demands and adapt to changes in the institution. Also there should be a timely training workshop on innovative work culture and practices for enhanced job performance.

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#### NOVELTY STATEMENT

Employees who exhibit level of innovation at work are more creative in providing solutions to work-related stress for enhanced job performance

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