Employee Flexibility and Work Quality in the Nigerian Manufacturing Sector: A Study of Some Selected Industries in Southwestern Nigeria

Flexibilidad de los empleados y calidad del trabajo en el sector manufacturero nigeriano: un estudio de algunas industrias seleccionadas en el suroeste de Nigeria

Ganiyu Taiwo Oladipo
University of Ilorin, Nigeria
oladipo.gt@unilorin.edu.ng
https://orcid.org/0009-0004-6409-543X

Olushola Joshua Omolekan
University of Ilorin, Nigeria
omolekan.oj@unilorin.edu.ng
https://orcid.org/0000-0002-7357-5927

Oluwayomi Omotayo Olota
University of Ilorin, Nigeria
olota.oo@unilorin.edu.ng
https://orcid.org/0009-0008-6633-9919

Isaac Ioribitir Aun
University of Ilorin, Nigeria
aun.ii@unilorin.edu.ng
https://orcid.org/0000-0002-9548-0486

Date of receipt: September 27, 2025
Date of acceptance: November 4, 2025
Date of publication: December 1, 2025

Employee Flexibility and Work Quality in the Nigerian Manufacturing Sector: A Study of Some Selected Industries in Southwestern Nigeria/
Ganiyu Taiwo Oladipo and others
https://doi.org/10.18800/360gestion.202510.013
RCG. 20251013

The complexity of the contemporary work environment has compelled organizations to adopt flexible work arrangements to enhance employee performance and satisfaction. Accordingly, this paper examines the implementation of employee flexibility and its effect on work quality. Specifically, it explores the impact of versatility, multitasking, and rapid response time on work quality. A survey research design was employed, targeting a population of 1,621 employees from selected manufacturing industries in Southwestern Nigeria. A scientifically determined sample size of 318 participants was selected, and a structured questionnaire was administered to them. The collected data were analyzed using partial least squares structural equation modeling (PLS-SEM). Findings reveal that multitasking exerts the strongest influence on work quality, followed by quick response time and versatility. The study concludes that employee flexibility plays a critical role in enhancing work quality within the Nigerian manufacturing sector. It is therefore strongly recommended that managers in selected manufacturing industries in Southwestern Nigeria prioritize the adoption of key flexibility features—namely, quick response time, multitasking, and versatility—to achieve high work quality.

Keywords: employee flexibility, work quality, versatility, multitasking, quick response time

La complejidad del entorno laboral contemporáneo ha obligado a las organizaciones a adoptar acuerdos laborales flexibles para mejorar el desempeño y la satisfacción de los empleados. En consecuencia, este artículo examina la implementación de la flexibilidad de los empleados y su efecto en la calidad del trabajo. Específicamente, explora el impacto de la versatilidad, la multitarea y el tiempo de respuesta rápido en la calidad del trabajo. Se empleó un diseño de investigación por encuesta, dirigido a una población de 1.621 empleados de industrias manufactureras seleccionadas en el suroeste de Nigeria. Se seleccionó un tamaño de muestra científicamente determinado de 318 participantes y se les administró un cuestionario estructurado. Los datos recopilados se analizaron utilizando modelos de ecuaciones estructurales de mínimos cuadrados parciales (PLS-SEM). Los hallazgos revelan que la multitarea ejerce la mayor influencia en la calidad del trabajo, seguida del tiempo de respuesta rápido y la versatilidad. El estudio concluye que la flexibilidad de los empleados desempeña un papel fundamental a la hora de mejorar la calidad del trabajo en el sector manufacturero de Nigeria. Por lo tanto, se recomienda encarecidamente que los gerentes de industrias manufactureras seleccionadas en el suroeste de Nigeria den prioridad a la adopción de características clave de flexibilidad (es decir, tiempo de respuesta rápido, multitarea y versatilidad) para lograr una alta calidad del trabajo.

Palabras clave: flexibilidad de los empleados, calidad del trabajo, versatilidad, multitarea, tiempo de respuesta rápido.

1. Introduction

In today's dynamic work environment, organizations are increasingly adopting flexible work arrangements to enhance employee performance and satisfaction. A study by Pradipta and Martdianty (2023) found that flexible working environments—such as remote work—have gained popularity among employees, leading to improved performance during turbulent situations. Similarly, research by Abiodun Solihu et al. (2023) and Akinwale et al. (2024) indicates that flexible work practices significantly increase worker retention in industrial firms in Nigeria. According to these results, companies and employees may benefit from introducing flexible work schedules.

Recent studies have examined the relationship between employee performance and flexible work arrangements in greater depth. For example, Tretiakov et al. (2023) emphasize that flexible work structures—often termed unconventional or alternative arrangements—allow employees to operate outside the conventional boundaries of standard organizational frameworks, leading to enhanced performance. Furthermore, Pradipta and Martianty (2023) emphasize the importance of supervisor support and job engagement in enhancing worker efficiency in flexible work settings. These studies highlight the many advantages of flexible work schedules in modern organizational environments.

In the Nigerian manufacturing sector, the adoption of flexible work practices has been associated with enhanced employee retention. Alotaibi (2023) found that such practices significantly increase employee retention in these companies. This is particularly relevant given the sector's need to retain skilled talent to sustain productivity and competitiveness. By implementing flexible work arrangements, manufacturing organizations can foster greater employee satisfaction and loyalty, ultimately contributing to higher work quality.

Furthermore, recent studies have emphasized the moderating role of supervisor support and job engagement in the relationship between employee performance and flexible work arrangements. Pradipta and Martdianty (2023) found that these factors mediate the association, suggesting that to fully realize the benefits of flexible work arrangements, organizations should prioritize cultivating a supportive work environment. This insight is particularly relevant for companies such as Kam Wire Industry, as it highlights the crucial role of managerial support in enhancing employee performance under flexible working conditions.

The adoption of flexible work arrangements has been shown to positively influence employee performance, retention, and overall work quality in various organizational contexts, including those in Nigeria. Studies by Alotaibi (2023), Prudenzi et al. (2024), and Teborg et al. (2024) provide empirical support for the advantages of flexible work practices. For firms in the Nigerian manufacturing sector, implementing such arrangements—alongside efforts to strengthen job engagement and supervisor support—can yield substantial improvements in workforce productivity and work quality.

Versatility in the workplace, while often considered an asset, can present challenges that may adversely affect work quality. Employees tasked with managing a wide range of tasks may experience cognitive overload, resulting in decreased efficiency and an increased likelihood of errors. This phenomenon is supported by research indicating that multitasking can impair performance and increase subjective strain (Akinwale et al.,

2024). Moreover, frequent task-switching disrupts the deep focus required for high-quality output, as the brain needs time to recalibrate when transitioning between tasks (Meyer, 2021). Over time, this can lead to burnout and a decline in job satisfaction, ultimately compromising overall work quality.

Although multitasking is often perceived as a strategy to boost productivity, it can actually be detrimental. Studies have shown that engaging in multiple tasks simultaneously leads to reduced performance and heightened strain (Ogakwu et al., 2024; Okolie et al., 2023). The human brain is not designed for true multitasking; rather, it toggles tasks, which can result in cognitive overload and elevated stress levels (Becker et al., 2022). This constant switching not only undermines efficiency but also increases the risk of errors, as individuals struggle to maintain focused attention on each task (Abiodun Solihu et al., 2023). As a result, work quality suffers, and employees may experience greater stress and lower job satisfaction.

The demand for quick response times in today's fast-paced work environments can negatively impact work quality. While rapid responses are often valued, they can lead to superficial information processing and hasty decision-making. Research indicates that multitasking and frequent interruptions elevate physiological stress, which can impair cognitive functions essential for thorough analysis and critical thinking (Becker et al., 2022). Additionally, the pressure to respond quickly may discourage reflective thinking, leading to solutions that are expedient rather than effective. Over time, this emphasis on speed and versatility over depth and quality can erode work standards and contribute to employee burnout. Accordingly, this study explicitly examines the effect of versatility on work quality, investigates the influence of multitasking, and assesses the impact of quick response time on work quality.

2. Literature review

2.1. Concept of Employee Flexibility

Employee flexibility refers to the versatility of workers in terms of when, where, and how they perform their tasks. This concept encompasses various arrangements—such as flexible work schedules, telecommuting, and job sharing—that help employees to better balance their professional and personal lives. Research suggests that flexible work schedules can enhance employee performance and satisfaction by aligning personal needs with organizational demands and reducing stress levels through improved work-life balance (Beutell, 2017). Additionally, workplace flexibility has been linked to higher employee engagement, as it offers individuals greater control over their schedules and environments, fostering autonomy and commitment (Shagvaliyeva & Yazdanifard, 2019).

Studies have shown that flexible work arrangements can enhance organizational engagement and reduce absenteeism, contributing to their growing popularity (Armstrong, 2016). However, the effectiveness of these arrangements often depends on the nature of the job and the specific requirements of the organization and its employees. For example, flexible schedules may not be suitable for roles that require strict or continuous collaboration, even though they can enhance job satisfaction for some (Raess & Burgoon, 2020). To meet

360: Revista de ciencias de la gestión, N° 10, 2025 pp. 1-19 / ISSN 2415-5861

the diverse needs of their workforce while maintaining productivity and service quality, organizations must carefully design and implement flexible work policies.

2.2. Work Quality

Work quality refers to the standard of output produced by an employee, encompassing factors such as accuracy, thoroughness, and consistency. High-quality work is marked by meticulous attention to detail, adherence to established procedures, and the effective application of skills and knowledge to achieve desired outcomes. According to Mathis and Jackson (2019), employee performance is evaluated based on various dimensions, with work quality serving as a critical indicator of an individual's contribution to organizational success. Maintaining high work quality is essential for businesses seeking to achieve both customer satisfaction and operational efficiency.

Several factors influence work quality, including corporate culture, resource availability, and employee engagement. Engaged employees—those who are committed to their roles and perceive their work as meaningful—are more likely to produce high-quality outputs (Kahn & Heaphy, 2019). Furthermore, a supportive work environment that promotes continuous learning and provides adequate resources can enhance an employee's ability to perform tasks effectively. Conversely, insufficient resources or lack of support may hinder performance, leading to diminished work quality and potentially adverse consequences for the organization (Christian et al., 2018).

2.3. Effect of Employee Flexibility on Work Quality

The relationship between employee flexibility and work quality is complex and multifaceted. Flexible work arrangements—by allowing employees to operate in environments conducive to focus and during their most productive hours—can lead to higher-quality output. According to de Menezes and Kelliher's (2018), flexible working arrangements are positively associated with job satisfaction and performance, which in turn contribute to improved work quality. Joyce et al. (2017) further emphasize that flexibility can mitigate work-life conflict, thereby reducing stress levels and improving employee concentration.

However, flexibility does not universally yield positive outcomes. Some studies suggest that poorly managed flexible work schedules may foster feelings of isolation, ultimately weakening collaboration and diminishing overall work quality (Golden & Gajendran, 2019). Moreover, the blurring of work-life boundaries may lead to longer workdays, which can compromise work quality and increase the risk of burnout (Allen et al., 2021). Therefore, it is crucial that businesses carefully evaluate the specific needs of their workforce when implementing flexible work practices and establish robust support systems that mitigate any potential drawbacks.

2.4. Effect of Versatility on Work Quality

Versatility in the workplace refers to an individual's ability to adapt to various roles and responsibilities, thereby enhancing organizational efficiency. Employees who

exhibit versatility can seamlessly transition between tasks, contributing to improved problem-solving and innovation within teams. This adaptability not only fosters personal growth but also aligns with organizational goals, leading to increased job satisfaction and enhanced performance. Research suggests that versatile employees are better equipped to handle dynamic work environments, helping maintain high standards of work quality. For example, a study on the quality of work life highlights the role of versatility in promoting job satisfaction and productivity (Martel & Dupuis, 2016). Additionally, versatile employees can bridge skill gaps within teams, ensuring that projects are completed efficiently and effectively. This multifaceted approach enables organizations to leverage diverse talents, resulting in improved overall performance.

However, while versatility offers numerous benefits, it must be managed carefully to avoid potential drawbacks. Over-reliance on versatile employees can lead to burnout, as they may be tasked with multiple responsibilities beyond their capacity. This can negatively impact both work quality and employee well-being. To maintain optimal performance, organizations should ensure a balanced distribution of tasks and provide adequate support to versatile employees. Furthermore, fostering a culture that encourages skill development across the workforce can help distribute the benefits of versatility more evenly. By doing so, companies can enhance work quality while promoting a sustainable and healthy work environment.

Thus, we propose the first hypothesis:

H_1: *Versatility has a positive influence on work quality.*

2.5. Effect of Multitasking on Work Quality

Managing multiple tasks simultaneously, or multitasking, is often perceived as a strategy to boost productivity. However, research shows that due to the cognitive limitations of the human brain, multitasking can actually diminish work quality. According to research by Paridon and Kaufmann (2017), multitasking in the workplace is associated with decreased performance, increased subjective strain, and heightened physiological stress. These findings suggest that while multitasking may create an illusion of efficiency, it often results in superficial task engagement and a greater likelihood of errors. Furthermore, frequent task-switching disrupts workflows, leading to longer completion times and reduced overall productivity.

Moreover, the negative effects of multitasking extend beyond individual performance to impact organizational outcomes. In service-oriented roles, multitasking has been linked to decreased customer satisfaction due to in-service delays and reduced attention to customer needs (Kc, Staats, & Gino, 2018). This underscores the importance of prioritizing tasks and focusing on one activity at a time to maintain high work quality. Organizations should consider implementing strategies that minimize unnecessary multitasking, such as clear task prioritization and structured workflows, to enhance employee performance and service quality. By fostering an environment that encourages focused work, companies can improve both employee well-being and organizational effectiveness.

Thus, we propose the second hypothesis:

H_2: *Multitasking has a negative influence on work quality.*

360: Revista de ciencias de la gestión, N° 10, 2025 pp. 1-19 / ISSN 2415-5861

2.6. Effect of Quick Response Time on Work Quality

Quick response time in professional settings is often associated with increased efficiency and improved customer satisfaction. In manufacturing, methodologies such as Quick Response Manufacturing (QRM) emphasize reducing lead times to enhance quality and lower costs (Godinho Filho & Veloso, 2018). By minimizing delays, organizations can respond more effectively to market demands, thereby maintaining high standards of work quality. Similarly, in healthcare, quick response times are critical; research has shown efficient response in emergency departments is fundamental to service quality and patient outcomes (Almomani & AlSarheed, 2016). These examples demonstrate that quick response times can significantly enhance work quality by ensuring the timely delivery of services and products.

However, the pursuit of speed must be balanced with the need for accuracy and thoroughness. An overemphasis on quick response can lead to rushed work, increasing the likelihood of errors and compromising quality. For instance, in emergency medical services, while quick response is essential, it must be complemented by accurate assessment and treatment to ensure patient safety (Considine, Botti, & Thomas, 2017). Therefore, organizations should strive to optimize response times without sacrificing precision. Implementing standardized procedures and providing adequate training can help achieve this balance, ensuring that employees can respond swiftly while maintaining high standards of performance.

Thus, we propose the third hypothesis as follows:

H_3: *Quick response time has a positive influence on work quality.*

2.7. Theoretical Review

According to the Self-Determination Theory (SDT), developed by Edward L. Deci and Richard M. Ryan in 1985, human motivation arises from the fulfillment of three fundamental psychological needs: relatedness, competence, and autonomy. Relatedness refers to the desire to feel connected to others; competence reflects the drive to master new skills and tasks; and autonomy is the need to act as the originator of one's own behavior. Deci and Ryan argue that when these needs are unmet, individuals may experience diminished motivation and well-being, whereas their fulfillment fosters self-motivation and mental health. These core psychological needs are reflected in the dimensions of employee flexibility—specifically versatility, multitasking, and quick response rate. The principles of SDT (relatedness, competence, and autonomy) are embedded in the metrics of employees' flexibility, which can promote staff well-being, increasing their level of motivation and commitment, and ultimately influence work quality and overall organizational performance (Ogakwu et al., 2024). Fulfillment of these needs directly impacts productivity in the workplace.

Applying SDT to the implementation of employee flexibility in the Nigerian manufacturing sector offers valuable insights into how such practices can enhance work quality. By granting employees greater autonomy in managing their tasks and schedules, organizations can fulfill the need for autonomy, which in turn leads to increased intrinsic

motivation. Providing opportunities for skill development and recognizing employee achievements satisfies the need for competence, further boosting motivation and performance. Fostering a collaborative work environment addresses the need for relatedness, encouraging dedication and a feeling of community among workers (Okolie et al., 2023). When combined, these strategies can lead to greater job satisfaction, enhanced productivity, and higher-quality work. Furthermore, the adoption of SDT for this study is motivated by observable trends in previous research (Godinho Filho & Veloso, 2018; Considine, Botti, & Thomas, 2017; Martel & Dupuis, 2016), which—although addressing related issues—have not critically explored the theory in relation to employee flexibility metrics of versatility, multitasking, and quick response rate, particularly in the context of work quality in the study area.

2.8. Empirical Review

Recent research has explored the impact of flexible work schedules on productivity and work quality. For example, Shepard and McNaughtan (2024), in their study published in *The Journal of Higher Education*, examined how individuals conceptualize job flexibility and what it means to them. To understand how employees across various industries perceived flexible work arrangements (FWAs), the researchers conducted qualitative interviews. The findings revealed that although leadership support for FWAs in higher education varies, there is a noticeable increase in workplace flexibility. The study concluded that FWAs, when tailored to employees' diverse needs and preferences, can contribute to retaining high-performing staff.

Furthermore, a 2024 study published in *Current Psychology* investigated the impact of flexible working on employees' quality of work life. Drawing on boundary theory and psychological empowerment theory, the researchers examined the intricate relationships among flexible working, boundary control, psychological empowerment, and work-life quality. The study found that, when effectively managed, flexible work schedules enhance employees' quality of life by granting greater autonomy over work hours and enabling more efficient job performance.

In another study, Sumardi et al. (2022) analyzed factors affecting employee performance, focusing on work-life balance, competency, employee welfare, and career development. The research highlighted that companies implementing a creative and innovative work culture—alongside employee flexibility and welfare—positively influence performance outcomes. Employees who feel supported in their career development tend to be more productive and deliver higher-quality work.

3. Methods

A descriptive survey research design was employed to collect data from a defined population and describe the phenomenon under investigation. The population consisted of 1,621 employees from selected manufacturing industries in Southwestern Nigeria, including prominent companies such as Dangote Group, Unilever Nigeria Plc, Nestlé Nigeria Plc, Nigerian Breweries Plc, and May & Baker Nigeria Plc. To determine the sample size,

360: Revista de ciencias de la gestión, N° 10, 2025 pp. 1-19 / ISSN 2415-5861

a stratified random sampling technique was used to ensure proportional representation across these industries and their respective locations. Using Taro Yamane's formula, the sample size was calculated to be 318 participants. A structured questionnaire served as the primary instrument for data collection, focusing on the role of innovativeness in enhancing productivity within Nigeria's manufacturing sector, particularly in Southwestern Nigeria. This sampling method ensured a balanced and justifiable representation of the population.

The study variables were adapted from empirical literature, and the research instrument was validated. Construct validity was employed to assess whether the questionnaire accurately measured the intended concept—specifically, the effect of employee flexibility on work quality. Additionally, a pilot study was conducted to evaluate content validity and further validate the research instrument. A Cronbach alpha analysis was performed to assess the internal consistency of the questionnaire items, yielding a reliability coefficient of 0.85. To analyze the impact of the independent variables on the dependent variable, structural equation modeling (SEM) was utilized.

The variables of the study were adapted from the extant literature, with emphasis on their relevance and applicability to the study area. Employee flexibility metrics were conceptualized as follows: versality, measured by task versatility and skill diversity (Martel & Dupuis, 2016; Shepard & McNaughtan's, 2024); multitasking, represented by multiple focus capability and activity balancing skills (Paridon and Kaufmann, 2017; Kc, Staats, & Gino, 2018); and quick response time, assessed through rapid solution deployment and prompt issue resolution (Almomani & AlSarheed, 2016; Considine, Botti, & Thomas, 2017; Godinho Filho & Veloso, 2018).

Model Specification

This research report adopts a multidimensional approach, involving multiple independent and dependent variables. The primary independent variable is employee flexibility, while the dependent variable is work quality. Given the use of Structural Equation Modeling (SEM), the following model is specified:

WQ = f (Versatility [TA, SD]; Multitasking [MFC, ABS]; Quick Response Time [RSD, PIR])

Where:

WQ = Work Quality
TA = Task Versatility
SD = Skill Diversity
MFC = Multiple Focus Capability
ABS = Activity Balancing Skill
RSD = Rapid Solution Deployment
PIR = Prompt Issue Resolution

4. Results

4.1. Response Rate

To collect the necessary data for this research, a structured questionnaire was administered. A total of 271 responses were received, representing 85.2% of the anticipated sample size.

An additional 47 responses would have been required to achieve the full estimated sample size. Nonetheless, the data obtained are considered valid and sufficient for analysis in this study.

Table 1. Descriptive Analysis and Normality Test

	Mean	Standard Deviation	Excess Kurtosis	Skewness	Number of Observations Used
Multitasking 1	3.410	1.455	-1.191	-0.478	271,000
Multitasking 2	3.513	1.239	-0.597	-0.569	271,000
Quick Response Time 1	3.214	1.229	-0.873	-0.355	271,000
Quick Response Time 2	3.421	1.311	-0.797	-0.537	271,000
Versatility 1	2.970	1.256	-1.033	0.000	271,000
Versatility 2	3.321	1.310	-1.033	-0.274	271,000
Work Quality 1	3.708	1.445	-0.622	-0.882	271,000
Work Quality 2	3.605	1.394	-0.784	-0.691	271,000
Work Quality 3	3.354	1.308	-1.042	-0.300	271,000

Source: SmartPLS Output, 2024.

The factors and indicators used in the study are presented in Table 1, which corresponds to the study's questionnaire. Several key variables were assessed, each illuminating a distinct aspect of employee flexibility and work quality. The mean scores, standard deviations, and number of observations used for each indicator provide valuable insights with practical implications for both scholars and practitioners.

The relatively high mean scores (above 3) suggest that respondents perceive a significant correlation between employee flexibility and work quality. The low standard deviations indicate minimal variability in responses, reinforcing the consistency of participant perceptions. These descriptive results underscore the nuanced connection between employee flexibility and productivity, highlighting the role of flexible practices in promoting high-quality work.

Regarding data distribution, the normality test results confirm that the dataset is suitable for further statistical analysis. For sample sizes exceeding 100, an absolute skewness value of less than 1.0 indicates a normal distribution. Similarly, acceptable kurtosis values should fall within the ±3.0 range. In this study, all variables met these criteria: skewness values were below ±1.0, and kurtosis values fell within the ±3.0 threshold. These results affirm that the data are normally distributed.

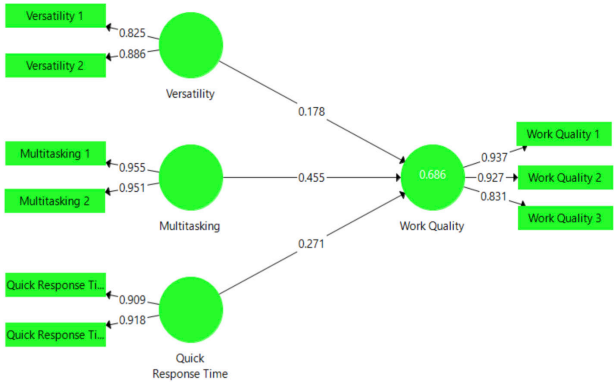
Consequently, the variables used to assess operational due diligence exhibit moderate means with low dispersion, meeting the assumptions required for causal modeling. This supports the suitability of the dataset for establishing a causal relationship between employee flexibility and work quality.

4.2. Assessment of Measurement Model

To assess the effect of employee flexibility on work quality, the study employs three key indicators of flexibility: versatility, multitasking, and quick response time. These variables are analyzed in relation to their impact on work quality.

360: Revista de ciencias de la gestión, N° 10, 2025 pp. 1-19 / ISSN 2415-5861

Figure 1. A Path Model of Employee Flexibility and Work Quality



Source: SmartPLS Output, 2024.

The structural path model illustrating the impact of employee flexibility on work quality is presented in Figure 1. The model includes one dependent variable—work quality—and three independent variables: versatility, multitasking, and quick response time. The results of the model indicate that all three independent factors significantly contribute to enhancing work quality. These findings suggest that employee flexibility plays a vital role in improving job standards and, therefore, should be valued by employers. The specific effects demonstrate that each flexibility dimension has a meaningful influence on work quality. Consequently, organizations aiming to elevate performance standards should prioritize strategies that promote and support employee flexibility.

Table 2. Construct Reliability and Validity

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Multitasking	0.898	0.952	0.908
Quick Response Time	0.802	0.910	0.835
Versatility	0.739	0.846	0.733
Work Quality	0.882	0.927	0.809

Source: Author's Compilation (SmartPLS 3.3.3 Output) 2024.

Table 2 presents key statistical measures related to the construct reliability and validity of the four latent variables in this study. These metrics assess how effectively these variables capture the core concepts they are intended to represent. The two primary metrics used to evaluate construct reliability are Cronbach's Alpha and Composite Dependability.

Cronbach's Alpha evaluates the internal consistency of a latent variable by measuring the degree of interrelatedness among its items. All four latent variables recorded Cronbach's Alpha values above the widely accepted threshold of 0.7, indicating strong internal consistency and suggesting that the items reliably represent their respective constructs. Composite reliability, which accounts for both internal consistency and the strength of the relationships between items and their latent variable, also yielded values exceeding 0.7 for all constructs. These high scores confirm the strong dependability of the measurement model. Additionally, the Average Variance Extracted (AVE) was used to

assess the convergent validity, which reflects the extent to which items within a construct are correlated and measure the same underlying concept. Each AVE value surpassed the recommended minimum of 0.5, indicating that the items within each latent variable are sufficiently convergent. Overall, the results demonstrate that the latent variables in this study exhibit strong reliability and construct validity. The high levels of composite reliability, internal consistency, and convergent validity support the appropriateness of these variables as robust measures within the research framework.

Table 3. Discriminant Validity

	Multitasking	Quick Response Time	Versatility	Work Quality
Multitasking	0.953			
Quick Response Time	0.805	0.914		
Versatility	0.701	0.654	0.856	
Work Quality	0.797	0.753	0.674	0.900

Source: Author's Compilation (SmartPLS 3.3.3 Output) 2024.

The latent variables of quick response time, versatility, work quality, and multitasking all demonstrate high evidence of discriminant validity, as indicated by the results presented in Table 3. Discriminant validity assesses whether constructs are distinct and not excessively correlated with one another. An examination of the correlation matrix reveals that the off-diagonal values, representing inter-construct correlations, are significantly lower than the diagonal values, which reflect each variable's correlation with itself. This pattern confirms that each latent variable is unique and measures a distinct feature of the overall construct. For example, quick response time shows a stronger correlation with itself than with versatility, work quality, or multitasking. Similarly, work quality exhibits a substantial self-correlation relative to its associations with other variables. This trend holds consistently across all constructs.

These findings indicate that the latent variables are not merely different expressions of a single underlying concept but instead represent distinct dimensions of employee flexibility and work quality. The ability of the measurement model to clearly differentiate among quick response time, versatility, work quality, and multitasking supports its appropriateness for the objectives of this investigation.

4.3. Multicollinearity

This analysis evaluates the correlation among the independent variables to determine whether they are excessively associated and potentially yield redundant results. In this study, the expected relationships between the independent variables are assessed using the Variance Inflation Factor (VIF).

Table 4. Discriminant Validity

	Multitasking	Quick Response Time	Versatility	Work Quality
Multitasking				3.342
Quick Response Time				2.971

360: Revista de ciencias de la gestión, N° 10, 2025 pp. 1-19 / ISSN 2415-5861

Versatility				2.056
Work Quality				

Source: Author's Compilation (SmartPLS 3.3.3 Output) 2024.

Table 4 presents the Variance Inflation Factor (VIF) values for the latent variables associated with work quality. The VIF scores for versatility, multitasking, and quick response time are all well below the commonly accepted threshold of 10, which is a positive indication. This suggests that these variables do not exhibit significant multicollinearity. In other words, these variables are not highly correlated with one another, and multicollinearity does not pose a concern in this study. Their inclusion in the model is statistically appropriate and supports the reliability of the structural analysis.

Table 5. Coefficient of Determination Score

	R-Squared	Adjusted R-Squared
Work Quality	0.686	0.683

Source: Author's Compilation (SmartPLS 3.3.3 Output) 2024.

Table 5 presents the coefficient of determination, also referred to as R-squared, a statistic used to evaluate how well a model fits the data. The model's R-squared value of 0.686 indicates that the independent (latent) variables explain approximately 68.6% of the variability in the dependent variable—work quality. This suggests that the model effectively captures and accounts for the observed variations in work quality. The adjusted R-squared value is 0.683, offering a more refined assessment of model fit by accounting for the number of predictors included. The minimal difference between the traditional and adjusted R-squared values implies that the inclusion of additional independent variables does not lead to overfitting or unnecessary complexity. This reinforces the robustness of the model's explanatory power. Overall, the work quality model demonstrates strong performance, as evidenced by both R-squared metrics. The results confirm that the model reliably explains variability in work quality and remains stable even when multiple latent variables are included.

Table 6. Assessment of the Effect Size (f^2)

	Multitasking	Quick Response Time	Versatility	Work Quality
Multitasking				0.198
Quick Response Time				0.079
Versatility				0.049
Work Quality				

Source: Author's Compilation (SmartPLS 3.3.3 Output) 2024.

The effect size, typically denoted as f^2 and presented in Table 6, is a statistical measure used to evaluate the strength of the relationship between independent variables and a dependent variable. In this study, the relative impact of each latent variable on work quality is assessed. Each of the independent variables has a value above the threshold of 0.02, indicating a small but meaningful effect. This suggests that each variable contributes

noticeably to the quality of work, albeit with a modest effect size. In other words, a moderate portion of variance in work quality can be attributed to changes in any one of these factors.

Table 7. Bootstrapping Results Showing Path Coefficient for Structural Model

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Multitasking -> Work Quality	0.455	0.451	0.077	5.916	0.000
Quick Response Time -> Work Quality	0.271	0.273	0.072	3.742	0.000
Versatility -> Work Quality	0.178	0.179	0.050	3.556	0.000

Source: Author's Compilation (SmartPLS 3.3.3 Output) 2024.

The null hypothesis—that employee flexibility has no discernible impact on work quality—was tested using the bootstrap route coefficient analysis presented in Table 7. The results indicate that employee flexibility variables—including multitasking, quick response times, and versatility—have a significant impact on work quality. The path analysis confirms that the associations between these flexibility dimensions and work quality are significant, with T-statistics exceeding 1.96 and the p-values below the conventional significance threshold of 0.05. These findings provide strong evidence to reject the null hypothesis. Consequently, the study concludes that employee flexibility—through multitasking, quick response time, and versatile skill sets—substantially influences the work quality produced.

5. Discussion

The study examined the impact of employee flexibility on work quality, testing the null hypothesis that there is no discernible effect. The findings revealed that multitasking, versatility, and quick response time all had statistically significant impacts on the work quality, thereby rejecting the null hypothesis. These results confirm that employee flexibility plays a crucial role in improving work quality. This outcome aligns with the findings of Shepard and McNaughtans (2024) and Raess and Burgoon (2020), whose research demonstrated that implementing workplace, functional, and working time flexibility improves organizational performance and job satisfaction—particularly among Romanian employees. These parallels reinforce the conclusion that employee flexibility is essential for improving work outcomes. However, the study's findings diverge from the conclusions of Godinho Filho and Veloso (2018) and Paridon and Kaufmann (2017), who reported no significant relationship between job flexibility and organizational performance. This discrepancy may stem from methodological differences, as both studies are monovariate designs and focused on single organizations rather than broader industry samples. Among flexibility dimensions, multitasking emerged as the most influential factor on work quality. While this is promising, studies such as Akinwale et al. (2024), Abiodun Solihu et al. (2023), and Okolie et al. (2023) have raised concerns about multitasking as a primary contributor to work-life imbalance and its potential drawbacks for employee well-being. Therefore, while multitasking significantly

360: Revista de ciencias de la gestión, N° 10, 2025 pp. 1-19 / ISSN 2415-5861

enhances work quality and productivity, operations managers should remain mindful of its limitations. Strategic implementation should aim to maximize its benefits while mitigating risks to employee health and balance.

Based on the empirical findings and statistical evidence from the study, it was revealed that employee flexibility—measured by versatility (proxied by task adaptability and skill diversity), multitasking (proxied by multiple focus capability and activity balancing skill), and quick response time (measured by rapid solution deployment, and prompt issue resolution)—significantly contributes to improving work quality in the study area. This implies that organizations seeking to improve work quality and staff productivity should prioritize key flexibility metrics. These include task versatility, skill diversity, the ability to manage and execute multiple tasks, work-life balance competencies, and a proactive approach to resolving issues promptly to prevent operational bottlenecks. These findings align with the principles of Self-Determination Theory (SDT), which serves as the theoretical framework for this study. SDT offers valuable insights into how employee flexibility in the Nigerian manufacturing sector can enhance work quality by fulfilling core psychological needs:

- Autonomy: Granting employees greater control over their tasks and schedules fosters intrinsic motivation.
- Competence: Providing opportunities for skill development and recognizing achievements strengthens performance and engagement.
- Relatedness: Cultivating a collaborative work environment promotes dedication and a sense of community among workers.

These dynamics are supported by recent studies (Prudenzi et al., 2024; Tretiakov et al., 2023; Austin-Egole et al., 2022; Prudenzi et al., 2021), which emphasize the role of flexible work structures in enhancing organizational outcomes through psychological empowerment and relational cohesion.

Moreover, the findings revealed that multitasking has the strongest effect on work quality, followed by quick response time and versatility. This implies that multitasking skills are crucial for enhancing work quality without compromising other key metrics, while maintaining a strong focus on productivity. To empower employees to achieve a high level of performance, flexible work arrangements can lead to improved outcomes. Additionally, training programs that foster flexibility and multitasking capabilities can significantly boost team productivity and overall work quality.

6. Conclusion

The study found that employee flexibility metrics—multitasking, quick response time, and versatility—have a significant impact on work quality in manufacturing companies in Southwestern Nigeria. Employees who respond quickly to tasks and challenges are better equipped to prevent bottlenecks and maintain workflow efficiency. Versatile employees can adapt to a range of roles and responsibilities, enhancing their ability to manage diverse tasks. When properly managed, multitasking enables the effective execution of multiple responsibilities, thereby boosting overall productivity. Collectively, these dimensions of flexibility enable employees to perform their duties more effectively, resulting in improved output and ultimately contributing to organizational success. The study concludes that

the strategic application of employee flexibility—particularly through multitasking, quick response time, and versatility—can substantially enhance work quality and drive productivity improvements.

6.1. Recommendations

Managers should prioritize key components of employee flexibility—quick response times, multitasking, and versatility—to enhance work quality and boost productivity. Given that multitasking demonstrated the most substantial impact on work quality, targeted efforts to strengthen employees' multitasking ability can yield significant performance gains. Operations managers can implement actionable strategies such as cross-training programs, flexible scheduling policies, or performance-based indicators to support and improve the quality of work. These initiatives enable employees to develop the skills necessary for adapting to dynamic work environments and managing multiple responsibilities effectively.

To further enhance workplace performance, managers should emphasize the development of specific flexibility competencies, including task versatility, skill diversity, multiple focus capability, activity balancing, rapid solution deployment, and prompt issue resolution. Providing ongoing support and resources—such as cross-training opportunities and adaptable work schedules—empowers staff to respond swiftly to changing demands and maintain high standards of work quality.

7. Limitation

This study focused on manufacturing firms located in Southwestern Nigeria. However, the findings may be cautiously generalized to other manufacturing firms due to the relatively homogeneous nature of their operational practices. Future research could expand the scope to include other geopolitical zones within Nigeria or explore other sectors of the economy for broader applicability. Additionally, this study examined versatility, multitasking, and quick response time as dimensions of work flexibility in relation to work quality. Future studies may consider incorporating additional flexibility variables or increasing the number of indicators to assess whether the influence of extraneous factors becomes more pronounced or remains consistent.

Author's role:

GTO: Conceptualization, Methodology, Software, Validation, Formal Analysis, Investigation, Resources, Data Curation, Writing - Original Draft, Writing - Review & Editing, Visualization, Supervision and Project Administration.

OJO: Conceptualization, Methodology, Software, Validation, Formal Analysis, Investigation, Resources, Data Curation, Writing - Original Draft, Writing - Review & Editing, Visualization, Supervision and Project Administration.

OOO: Conceptualization, Methodology, Validation, Formal Analysis, Investigation, Resources, Data Curation, Writing - Original Draft, Supervision and Project Administration.

IIA: Conceptualization, Methodology, Validation, Formal Analysis, Investigation, Resources, Writing - Original Draft, Writing - Review & Editing, Visualization and Supervision.

360: Revista de ciencias de la gestión, N° 10, 2025 pp. 1-19 / ISSN 2415-5861

references

Abiodun Solihu, A., Iyobhebhe, I., & Sam, A. S. K.

2023 The Impact of Work-Life Balance on Employee Work Quality Improvement in Nigeria. *European Journal of Human Resource, 7*(1). https://doi.org/10.47672/ejh.1516

Akinwale, O. E., Kuye, O. L., & Akinwale, O. E.

2024 Predictors of workaholism and quality of work-life among information technology (IT) professionals in Nigeria: a dynamite promoting brain-drain albatross. *International Journal of Organizational Analysis, 32*(9). https://doi.org/10.1108/IJOA-05-2023-3772

Allen, T. D., Merlo, K., Lawrence, R. C., Slutsky, J., & Gray, C. E.

2021 Boundary management and work-nonwork balance while working from home. *Applied Psychology, 70*(1), 60-84.

Almomani, I., & AlSarheed, A.

2016 Response time, waiting time and service quality in emergency department. *International Journal of Medical Research & Health Sciences, 5*(4), 68-74. http://doi.org/10.11591/ijphs.v9i3.20435

Alotaibi, T. S.

2023 Flexibility and Saudi Employees' Perceptions of Job Satisfaction: A Multisector Study. *Journal of East-West Business, 29*(3). https://doi.org/10.1080/10669868.2022.2118926

Armstrong, M.

2016 *A Handbook of Human Resource Management Practice* (10th ed.). Kogan Page.

Austin-Egole, I. S., Iheriohanma, E. B. J., & Iheanacho, E. N.

2022 Flexible Working Arrangements (FWAs) and Organizational Performance: An Overview. *International Journal of Applied Research in Social Sciences, 4*(4), 131–146. https://doi.org/10.51594/ijarss.v4i4.341

Baridula, V., & Adanma, M. J.

2021 Flexible Work Practices and Employee Retention in Manufacturing Companies in Nigeria. *International Journal of Applied Research in Social Sciences, 3*(1), 1–10. https://doi.org/10.46654/ij.24889849.s7457

Becker, J. H., Alzahabi, R., & Hopwood, C. J.

2022 Physiological stress in response to multitasking and work interruptions: A study protocol. *PLOS ONE, 17*(2), e0263785. https://doi.org/10.1371/journal.pone.0263785.

Beutell, N. J.

2017 Work schedule, work schedule control and satisfaction in relation to work-family conflict, work-family synergy, and domain satisfaction. *Career Development International, 15*(5), 501-518. https://doi.org/10.1108/13620431011075358

Christian, M. S., Garza, A. S., & Slaughter, J. E.

2018 Work engagement: A quantitative review and test of its relations with task and contextual performance. *Personnel Psychology, 64*(1), 89-136.

Considine, J., Botti, M., & Thomas, S.

2017 Do knowledge and experience have

specific roles in triage decision-making? *Academic Emergency Medicine, 14*(8), 722-726. https://doi.org/10.1197/j.aem.2007.04.015

de Menezes, L. M., & Kelliher, C.

2018 Flexible working and performance: A systematic review of the evidence for a business case. *International Journal of Management Reviews, 13*(4), 452-474. https://doi.org/10.1111/j.1468-2370.2011.00301.x

Godinho Filho, M., & Veloso, F. M.

2018 A comparative analysis between the quick response manufacturing and time-based competition. *Brazilian Journal of Operations & Production Management, 14*(3), 414-427. https://doi.org/10.14488/BJOPM.2017.v14.n3.a14

Golden, T. D., & Gajendran, R. S.

2019 Unpacking the role of a telecommuter's job in their performance: Examining job complexity, problem solving, interdependence, and social support. *Journal of Business and Psychology, 34*(1), 55-69. https://doi.org/10.1007/s10869-018-9530-4

Joyce, K., Pabayo, R., Critchley, J. A., & Bambra, C.

2017 Flexible working conditions and their effects on employee health and wellbeing. *Cochrane Database of Systematic Reviews,* (2), CD008009. https://doi.org/10.1002/14651858.CD008009.pub2

Kahn, W. A., & Heaphy, E. D.

2019 Relational contexts of personal engagement at work. In C. Truss, R. Delbridge, K. Alfes, A. Shantz, & E. Soane (Eds.), *Employee Engagement in Theory and Practice* (pp. 82-96). Routledge.

Goes, P. B., Ilk, N., Lin, M., & Zhao, J. L.

2018 When more is less: Field evidence on unintended consequences of multitasking. Management Science, 59(7), 1566-1584. Retrieved from https://www.jstor.org/stable/48748178

Martel, J. P., & Dupuis, G.

2016 Quality of work life: Theoretical and methodological problems, and presentation of a new model and measuring instrument. *Social Indicators Research, 77*(2), 333-368. https://doi.org/10.1007/s11205-004-5368-4

Mathis, R. L., & Jackson, J. H.

2019 *Human Resource Management* (14th ed.). Cengage Learning.

Rubinstein, J. S., Meyer, D. E., & Evans, J. E.

2001 Executive control of cognitive processes in task switching. *Journal of Experimental Psychology: Human Perception and Performance, 27*(4), 763–797. https://doi.org/10.1037/0096-1523.27.4.763

Ogakwu, N. V., Ede, M. O., Manafa, I. F., Okeke, C. I., & Onah, S. O.

2024 Quality of Work-Life and Stress Management in a Rural Sample of Primary School Teachers: An Intervention Study. *Journal of Rational - Emotive and Cognitive - Behavior Therapy, 42*(1). https://doi.org/10.1007/s10942-022-00494-8

360: Revista de ciencias de la gestión, N° 10, 2025 pp. 1-19 / ISSN 2415-5861

Okolie, U. C., Mukoro, A., & Otite, A.

2023 Work-life balance policy and practice in Nigeria. *Journal of Social Studies (JSS), 19*(1). https://doi.org/10.21831/jss.v19i1.58628

Paridon, H. M., & Kaufmann, M.

2010 Multitasking in work-related situations and its relevance for occupational health and safety: Effects on performance, subjective strain and physiological parameters. *Europe's Journal of Psychology, 6*(4), 110-124. https://doi.org/10.5964/ejop.v6i4.226

Pradipta, H. A., & Martdianty, F.

2023 Effect of Flexible Working Arrangement on Employee Performance: Mediating Role of Work Engagement and Supervisor Support in Indonesia Digital Startup. *Jurnal Aplikasi Bisnis Dan Manajemen, 9*(2), 512. https://doi.org/10.17358/jabm.9.2.512

Prudenzi, A., Gill, K., MacArthur, M., Hastings, O., Moukhtarian, T., Jadhakhan, F., Patel, K., Kershaw, C., Norton-Brown, E., Johnston, N., Daly, G., Russell, S., Thomson, L., Munir, F., Blake, H., Meyer, C., & Marwaha, S.

2024 Supporting employers and their employees with mental health conditions to remain engaged and productive at work (MENTOR): A feasibility randomised controlled trial. *Journal of Contextual Behavioral Science, 31*. https://doi.org/10.1016/j.jcbs.2023.100720

Raess, D., & Burgoon, B.

2015 Flexible work and immigration in Europe. British *Journal of Industrial Relations, 53*(1), 94-111.

Shagvaliyeva, S., & Yazdanifard, R.

2019 Impact of flexible working hours on work-life balance. *American Journal of Industrial and Business Management, 4*(1), 20-23.

Teborg, S., Hünefeld, L., & Gerdes, T. S.

2024 Exploring the working conditions of disabled employees: a scoping review. In *Journal of Occupational Medicine and Toxicology* (Vol. 19, Issue 1). https://doi.org/10.1186/s12995-023-00397-z

Tretiakov, A., Jurado, T., & Bensemann, J.

2023 Employee Empowerment and HR Flexibility in Information Technology SMEs. *Journal of Computer Information Systems, 63*(6). https://doi.org/10.1080/08874417.2022.2158962