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WORKPLACE FLEXIBILITY AND EMPLOYEE ENGAGEMENT IN MANUFACTURING INDUSTRY IN BAYELSA STATE

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ABSTRACT

This study examined the workplace flexibility and employee engagement in manufacturing industry in Bayelsa State. This study investigates the influence of remote work on employee engagement in manufacturing industry in Bayelsa state. The target population of the study shall consist of the staff of the selected manufacturing firms in Bayelsa State. There are one hundred and fifty (150) Manufacturing firms in Bayelsa State as at 2023 (Wikipedia, 2023). The accessible population for this study will consist of six (6) manufacturing firms in Bayelsa state. Ten (10) staffs from each of the manufacturing firms was considered in this study to make up the total respondents of the study. Stratified random sampling technique was employed. Cross sectional Survey research design was adopted, and the statistical tool used comprised frequency, correlation, and multiple regression analysis. The findings of this study concluded that part-time jobs, remote work and flexi-time has a positive significant relationship with employee engagement. It was hereby recommended that management should imbibe self-roistering as part of the flexible timing procedure; it tends to enhance the employees' abilities, interest and zealously towards their jobs in the organization. It brings about good quality products too. Remote working systems should be adjusted according to the preferences of the employees so that their performance can be improved.

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Introduction

With increased globalization, manufacturing leaders continue to experience a lot of pressure to find innovative strategies to tackle labour shortages and create dynamic capabilities. The manufacturing sector in Nigeria is no exception. Nigeria's manufacturing output for 2020 was \$54.76B, a 6% increase from 2019 levels and putting it on course towards becoming one of the world's top ten economies in terms of manufactured goods by 2025 (World Bank, 2022). The high cost of imported products, shortage of skilled labor, and poor management continue to cripple profitability in the manufacturing sector. The negative impact of the tough business operating environment in Nigeria has led to absenteeism, attrition, and poor customer service, which impacts business profitability (Uma et al., 2019).

Highly engaged employees are more productive, good advocates, and positively influence organizational performance and corporate reputation (Osam& Shuck, 2020). Disengaged employees are not committed to the business vision and goals leading to poor organizational outcomes (Sudjiwanati&Pinastikasari, 2020). Therefore, in a constantly changing external environment, leaders must engage and empower the workforce in a way that improves job performance and business growth (Ibiwoye, Mojekwu&Dansu, 2020).

One major problem that individuals face today, and even more so in the future, is balancing work with family responsibilities and duties. Workplace flexibility arrangement appears to be an important part of the organisational responsibility to its employees. In the past, it has never been so easy to combine work with home and family life in Nigeria, but the introduction of workplace flexibility has made it possible today, especially in manufacturing industries. Businesses that focus on workplace flexibility have loyal staff. As a result, workers are more motivated and productive, and firms can compete with one another for the best staff (Singh, 2019).

Flexibility is the opportunity to customize work in different manners, being attractive to most employees. The most common flexible working practices are flexible working location and hours (Weideman and Hofmeyr 2020). Workplace flexibility is an employer tool used to reduce employee stress and improve employee performance and job retention. Workplace flexibility arrangements, such as part-time jobs, shift jobs, work-sharing, shortened 24-hour per day, work-from-home for nursing mothers, five-day jobs a week, sabbatical leave, career flexibility, leave, and so on, if taken into account by the human resources department of an organisation will help minimize the work-life conflict of employees, motivate employees and improve their performance.

Over the years, it has been recognized that flexible work structures can be helpful for both organisations and workers and can help to maintain a work-life balance (Chung & Van der Lippe, 2020). Employees prefer flexibility in working time and location to suit their preferred, more individualized lifestyles and to be able to better combine paid work with other life activities (Čiarnienė, Vienažindienė&Adamonienė, 2018). Workplace flexibility has important implications for individuals, organizations, and society, and attracts attention from researchers analysing the different intersections of work and family domains (Kossek&Lautsch, 2018), benefits, and risks of implementing flexible work practices. Employees who previously had to deal with traffic in their daily commute, particularly in large cities, might benefit from workplace flexibility arrangements. With greater control over their personal lives outside of the workplace, workers can increase their level of job satisfaction. Employees who arrive on time, who are not weary, who are focused on their

tasks, and who are devoted to their work all contribute to a company's ability to function efficiently (Morgan & Liker, 2020).

Although the desire to adapt to workplace flexibility arrangements can change across age/generations and gender, it might not positively affect employees' productivity and engagement (Piszczeck and Pimputkar 2020). While younger employees seek workplace flexibility arrangements to achieve their career goals, older workers value workplace flexibility for a better work-life balance (Piszczeck and Pimputkar 2020). From the gender perspective, Kim, Henly, Golden, and Lambert (2020) outline that female and male employees appreciate workplace flexibility practices differently. Dilmaghani (2021) states that female and male employees might have different preferences regarding flexible working practices offered by organizations, but this will depend on the life stage, for example, if they are single, married, or caregiver. The goal of this research is to fill a need in the existing body of knowledge on the relationship between workplace flexibility and employee engagement in manufacturing industries in Bayelsa State.

Work-life issues, health outcomes, and job engagement have all been included in the recent expansion of research on workplace flexibility's impact on employee engagement (Rudolph and Baltes, 2017). Recent research has examined the effects of customized workplace flexibility on employee absenteeism, turnover, profitability, and productivity (Berkery et al., 2017; Bilgic, 2020; George, Amah & Nkasiobi, 2022). Although the scientific community has examined flexible work arrangements and employee engagement extensively in recent years, there are currently few studies that address both of these themes at the junction of these two domains. In the past, researchers looked at how workplace flexibility affects productivity in the workplace (Fan, 2023; Bolino, Kelemen, & Matthews, 2021). During a time of crisis and uncertainty, there is little focus placed on employee engagement (George, Amah & Nkasiobi, 2022). The study aims to fill this gap by identifying how workplace flexibility can contribute to employee engagement at different levels of abstraction. In other words, this research aims to see whether workplace flexibility has an impact on employee engagement in the manufacturing industry in Bayelsa state.

Based on the above, the study is aim to explore the influence of workplace flexibility on employee engagement in manufacturing industry in Bayelsa state. In order to achieve the aim, the flowing specific objectives are put forward:

- 1 To ascertain the influence of part-time jobs on employee engagement in manufacturing industry in Bayelsa state.
- 2 To investigate the influence of remote work on employee engagement in manufacturing industry in Bayelsa state.
- 3 To ascertain the influence of flexi-time and employee engagement in manufacturing industry in Bayelsa state.

Literature Review

Workplace Flexibility

Flexibility includes a range of possibilities related to an employee's choice to do work and its related tasks in the time and location that better fits their arrangements (Botrel Vilela, 2021). According to Avadhani and Menon (2022) job flexibility entails not only variability in time and place of

employment, but also sharing of jobs, career breaks (maternity/paternity leave), part-time and term job. Austin-Egole, et al., (2020) addressed three broad categories of flexible work arrangement (FWA) which are flexi-time (flexibility in scheduling), tele-homework (flexibility in location), and part-time (flexibility in the duration of work). Although each structure may be used individually, it is mostly combined to complement each other (Dorigo et al., 2017). Idowu (2020) proposed that flexibility in work would offer ease in planning, not in reducing working time. Therefore, flexibility in the job may be defined as the ability of the employee to control both the length of his/her working time and the location of his/her job (remotely from the office). This ability in scheduling work should be provided by the employer. Several researchers suggest that flexible work practices promote work and family harmony, and that changing family patterns are advantageous for both women and men (Saxena, 2018).

Employees, who are giving maximum output, will continue to sustain the same output. Supervisor evaluates an employee's capability and job performance with the flexible work schedule while maintaining productivity. By decrease in the time, supervisor believes that they can improve employee confidence, loyalty, thus enhancing productivity. Flexible working intended at making convenience for employees to change when, where and for how many hours they want to work. Flexible working persuades workers to bring in new ideas for the conflicts occurring and they convinced line managers to take flexible working options more sincerely.

Researchers distinguished that the effects of exhaustion, are mostly related to a wide range of physical and mental health problems. People cannot give their output to maximum capacity without good health and proper functioning conditions, which cause failure for the employees" to reach their own proficient potential and the output required to make the organization perform efficiently and effectively. The secret to the job satisfaction is our ability to control our moods on a daily basis strain. Emotional stability enhances the employee's ability to handle work pressure and stress, to consistently carry out the responsibilities, and self-indulgence. Emotionally stable people are able to sustain an analytical approach when dealing with a nerve-racking work condition.

When addressing the value of workplace flexibility, Speitzer et al. (2017) noted flexibility does not solely relate to work hours. Speitzer et al (2017). conducted a literature review on alternative employment agreements. Their review covered a decade of academic work on alternative employment, noting how flexibility was a key element of these kinds of arrangements. Flexibility was valued in relation to work hours, work location, and employment relationships. All three factors tended to benefit more highly skilled workers who actively chose alternative arrangements. Lower skilled workers who were reliant on organizational policies and practices were often less successful in gaining and maintaining work or a steady income. Organizational leaders must adjust their flexibility policies and practices to accommodate the varying skills levels and job requirements of their employees (Speitzer et al., 2017). Similar to the findings from Speitzer et al. (2017) study, much of the literature concerning flexible workplaces has highlighted many benefits and disadvantages of remote and/or distributed workplaces and may depend on the specific individual seeking employment.

Nature of Workplace Flexibility

Personality: These are personal demographics unrelated to employment (e.g., age, gender, ethnicity, education, and income). They're control variables. They may also be independent variables in primary research questions. Pitt-Catsoupes and Matz-Costa (2008) examined the association between

organizational flexibility and employee engagement. Hill et al. (2003) discovered that both men and women are interested in job flexibility, but different ways. Gender and age are crucial to investigating concerns concerning flexibility at various life phases (Hill et al., 2008). Family and home: Marital/partner status, household composition (e.g., dual-earner vs. single earner), presence, age, responsibility for children, and caregiving arrangements are employed in workplace flexibility research (Brown, 2017).

Workplace traits. Workplace variables affect when, where, and how long activities are accomplished. Formal flexible work rules (e.g., flextime, flex place, leaves, and reduced-hours work alternatives) improve workplace flexibility but aren't enough. Because of assumptions that workplace flexibility is connected with negative punishments, the company culture must openly embrace flexible alternatives to achieve workplace flexibility (Berry & Hughes, 2020). Fostering organizational support requires a culture that values the full individual, not just "the bottom line." **Community traits.** Community factors affecting workplace flexibility include infrastructure and social interactions (Bouncken & Reuschl, 2018). Community infrastructure is its physical environment. Transportation, utilities, buildings, and child care are examples of community infrastructure. This infrastructure's limits or possibilities affect workplace flexibility. A vast body of research has linked commute distance, unpredictability (e.g., traffic delays), and lack of choice (i.e., just one route to work) to greater personal stress and poorer job motivation. Long commutes are linked to children's internalizing behaviour among welfare-leaving single moms (Bruns & Pilkauskas, 2022). This lower stress is likely linked to a stronger work-life balance, which affects other outcomes.

Vitality: There is minimal research on employment flexibility and community vitality (and none on this issue). Small but considerable literature has established this relationship. Research shows that occupational flexibility affects volunteerism. Participation in community groups is favorably connected with part-time employment for women, schedule flexibility), and self-directedness in work (Zacher & Froidevaux, 2021). This voluntary engagement is vital because many groups give services to community members and because social interactions may foster a healthier neighborhood environment. Several international and national studies have indicated that community involvement improves overall health (Yuan, et al., 2021). To truly capture workplace flexibility's entire effects, studies should include community consequences.

Part-time Jobs

Part-time work or a part-time job is a flexible work arrangement which means working less than full-time hours. It usually means working fewer days per working week and employees are normally considered to be part-time if they commonly work fewer than 30 hours per week. Part-time employees receive the same employment entitlements as full-time workers on a pro-rata basis.

Part-time work is especially convenient for young moms and dads, students, retirees, people who want to start their own business and need more time, and all other workers who can't work, or don't need, a full-time job. Part-time work leaves employees more time and energy for other activities, so it's especially appropriate for family-oriented people. From the employee's point of view, there are a number of factors to consider when looking at part-time rather than full-time employment. Employees might consider absolute income first, but there are other important factors involved, such as: family time, overall stress and health, transportation costs etc. There are of course some key advantages and disadvantages for employers and employees when it comes to part-time work. However, in most cases the pros outweigh the cons, so it's definitely worth a try for both parties.

Remote Work

Flexible working location is the flexibility given to employees to conduct work from home, offering a range of benefits such as time management and work-life balance (Wheatley 2017). Although, Kim et al. (2020) extend that remote working may positively or negatively affect employees' personal and professional lives. This depends on the resources, adequate space to work, distractions, and other challenges and difficulties that may appear while working from home. Ugargol and Patrick (2018) found that flexible working practices significantly influence employees' engagement and, as a result, their productivity. These findings are similar to the encountered in this study, which indicates that most participants considered satisfied with their productivity while working from home. In addition, the employees in the age group 25-35 were the most satisfied with their levels of productivity, having a slight difference from the other age groups.

Employees can face many challenges and difficulties while working from home (Klopotek 2017). This study shows that employees identified lack of communication, appropriate space to work, and social distancing/isolation as their principal challenges working remotely. These results partially agree with Klopotek (2017), who identified that employees consider the main challenges on remote working: work-life balance, social distancing and isolation, and difficulty executing tasks. It shows the need for practices to reduce the effects of social distancing and isolation within workers that were used to presential work. Sellers (2021) suggests that organizations have to provide ways to minimize the drawbacks of remote working, such as social isolation and lack of communication with colleagues by implementing more social events to improve the interaction between co-workers. Within those practices could be video hangouts, outdoor activities, mental health resources, etc. Employers must keep employees' well-being within the organization, even more after the pandemic outbreak (Sellers 2021).

Even though employees may face challenges with remote working, they also might identify some gains and benefits with the flexibility to work from home. For example, the participants of this study indicated an increase in productivity and facility to execute tasks as main gains with remote working. However, Klopotek (2017) encountered different perspectives, as employees identified flexible working hours, not travelling to work, and influencing the workplace as the main benefits of working from home. Prodanova and Kocarev (2021) outline that employee's willingness to work remotely might differ depending on the sector, working area, and organizational culture. Those factors may also influence employee's job satisfaction and productivity. Botrel Vilela, (2021) extend that individuals from different cultures may have a distinct view of flexible working arrangements. Besides that, the Covid-19 pandemic possibly also influenced the findings of this study.

Flexi-time

Flexibility-time is a scheduling programmed for full-time employees which allows them to choose their starting and finishing times daily, provided they complete a stipulated number of hours start and/or end the work day earlier (or later) than usual, where workers can set their own starting and stopping times (Mary, 2024). Employees are required to be present during certain "core hours", which is usually fixed at a period between the latest permissible starting time and earliest permissible finishing time (Mary, 2024). A company has core hours between 9:00 a.m. and 3:00 p.m. The employees then have the choice to start anytime between 6:30 a.m. and 9:00 a.m., and the choice to leave anytime between 3:30 p.m. and 6:00 p.m., provided they work eight hours. Another variation

has employees arrive 7:00 a.m. and 9:00 a.m., have a minimum one-half hour lunch break between 11:00 a.m. and 1:00 p.m., and finish between 3:30 and 6:30 p.m., again provided eight hours are worked (Youngstedt, et al., 2019). Flexible work options are more likely to be successful when an organization encourages managers and employees to view flexibility as a mutually beneficial business process for determining the best approach to how, where and when work is done.

Organizations provide the traditional flexi time offer. The flex time offer allows the worker to work around the rush hours and then they have been provided a flexibility to take some break to go home or to take lunch or take children from school etc. The employees are also given a daily flextime offer. Daily flexi time offer allows them to meet the requirement of unanticipated works and helps then in saving their job and keep the all parties (employee and employer) happy. There is also a concept of shift in the organizations where the workers are offered with different shifts to choose on that fit to him/her to have balanced life. There are no policies for the flexibility in most of the organizations and the flexibility is offered at informal basis so this causes a big problem in the management of the human resource. There are much of the chances that the higher income people can accommodate the personal matters during work even the flexible time offers are not there and they can informally take the advantage of being on the higher posts. So, there must be some equal base for all the workers to give them ease on work place.

Effectiveness of Workplace Flexibility

Considering the importance of good flexible working practices is necessary to analyze the effectiveness of flexibility in organizations, and employers should often communicate with employees and evaluate these practices. Attwood (2018) argues that organisations and employees may face many obstacles such as operational difficulties, additional pressure or overworking, work arrangements difficulties, and sometimes, extra costs while implementing flexible working. Therefore, before introducing flexible working, employers should certify that the flexible working arrangements are worthwhile (Bloomfield and Proffitt 2017). One of the main issues related to flexible working for employees is managing work life balance; once some employees do not have an appropriate place to work from home, dealing with family-related issues and distractions. Consequently, some employees may also be resistant to work from home (Van der Lippe & Lippényi, 2020). On the other and, employees might also abuse the flexible policy and work fewer hours than expected, while others might take advantage to do personal activities while working (Weideman and Hofmeyr 2020).

Alternatively, Kossek and Kelliher (2023) argue that work-life balance is a benefit granted by flexible working practices that enable people to give an equal commitment to both personal and professional life. The same authors affirm that employers could also benefit from flexible working as it facilitates and improves recruitment, retention, absenteeism, and employer branding (Kossek & Kelliher, 2023). However, Botrel Vilela (2021) suggest that some companies offer various flexible working possibilities. However, they do not investigate the needs of the business and its employees, implicating lower effectiveness of these practices.

Flexible working can be highly beneficial to an organization if applied correctly. Among the benefits are attracting new talents, increasing employee engagement, and employee retention (Van Geert, 2019). However, it is essential to highlight that although working flexibility might affect employees' productivity, it does not necessarily improve job satisfaction (Weideman and Hofmeyr 2020).

Employee Engagement

Employee engagement is an “emergent working condition and a positive cognitive, emotional and behavioral state directed toward organizational outcomes” (Yaslioglu, 2019). Another definition describes employee engagement as the readiness of workers and their skills to help their organization be successful by being flexible in different situations (Marin, 2021). Shuck and Wollard (2009) also define employee engagement as a growing working state in which the employee’s perceptions, feelings and behaviors are aimed as the desired organization results. One more definition comes from Turner, P., & Turner, (2020) who views employee engagement as an energetic state of involvement with personally fulfilling activities that enhances one’s sense of professional efficacy.” Their opposites are “burnout dimensions of exhaustion, cynicism and inefficacy. Employee’s connection and commitment to the organization are also key to employee engagement (Badshah Hussain, et al., 2021).

True engagement occurs when all employees in an organization are passionate about the business strategy and are committed to it its success (Govender & Bussin, 2020). Employees have more than work satisfaction, they are gratified to serve and are promoters of the products and brand name. There is evidence that employee engagement increases productivity and overall performance, creates a better and more productive work environment, reduces non-attendance and employees leaving (Wambui, 2022). In a study in the GCC countries it was discovered that when employees are engaged, they tend to produce more and put in more effort to help their organizations (Singh et al., 2012).

According to Obuobisa-Darko (2020), engagement (EE) can be divided to three characteristics to explain which are vigor, absorption, and dedication. Vigor was defined more in mental and physical part which employees have a high level of work energy when completing their given tasks while absorption was the feeling where employee feel happy and satisfied with their job, they will fully commit with their given tasks. Besides, dedication was defined as loyalty of employees where they are always motivated and excitement in doing their tasks. Higher employee engagement can bring over positive consequences of business outcome such as customer loyalty (Turner & Turner, 2020), employee performance and profitability as well as reduce turnover intention in the organization. For instance, a study done by Tower Perrin for 3 years showed that company’s profit increased 28% while the employee fully engages to organization, but the profit fell 11% when the organization was less engaged by employees (Yahya, et al., 2018). Similarity, Davis (2021) had collected more than 7500 data from around 36 countries to understanding the relationship between employee engagement and other constructs such as customer satisfaction, employee turnover, customer loyalty, productivity and profitability. The results showed that there were positively correlated with between employee engagement and all tested constructs except employee turnover which was negatively correlated with employee engagement.

Workplace Flexibility and Employee Engagement

According to Armstrong and Taylor (2017), employee engagement occurs when people have identification with organizations’ values and, consequently, are committed to their work and organisation. As a result, employee engagement correlates to commitment, motivation, wellbeing, job satisfaction, passion, and vitality (Armstrong & Taylor 2017). Flexible working might positively influence employee engagement, job satisfaction and increase productivity. For example, remote working and flexible working hours can increase autonomy and lower work-family conflict,

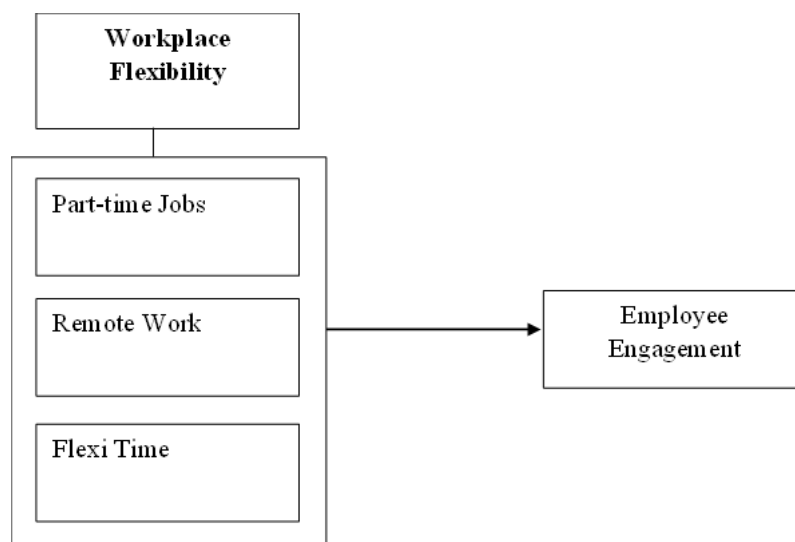
enhancing the relations between family members (Kim & Gong 2017). Flexible working arrangements are not only beneficial to employees, but also for employers, as there is or it should be a strategy behind all practices of flexible working to boost the business outcomes and have a workforce more motivated, productive and satisfied (Sebastiao, 2022).

Flexible work arrangement (FWAs) may affect organizational and individual (behavioral and work-related) benefits (Austin-Egole, et al., 2020). FWAs affect employee and organizational productivity. Absenteeism, turnover, and retention are the most researched flexible work variables. Without workplace flexibility, people may reduce their workload or fake illness to enhance their work-life balance (Nnko, 2022). Due to its negative consequences, companies are trying to decrease absenteeism (Carraro, 2021). FWAs are said to reduce employee absenteeism by reducing stress. Flexible work-time design reduces absenteeism. Like absenteeism, employer turnover is bad. FWAs reduce absenteeism and turnover. Employees consider companies that give FWAs as sensitive to their well-being, which motivates them to be more loyal, which might minimize turnover, absenteeism, and retention (Berkerv et al., 2017).

Employer-driven agreements should boost organizational productivity to justify their existence (increased productivity). Previous research reveals that their impacts on organizational productivity are negative. Weekend, shift, and overtime labor increase turnover, but not organizational productivity (Moon, et al., 2023). Abo, shift work increases absenteeism and turnover of long-term workers (Aziz-Ur-Rehman & Siddiqui, 2019). Previous results show the necessity for investigation of employee-driven and employer-driven arrangements, as well as their impacts on organizational productivity, to prove that FWA effects differ by main beneficiary.

In summary, organisations that aim to enhance employees' engagement and productivity through flexibility must understand employees' needs and adapt flexible working practices to fit in the business strategy (Prodanova&Kocarev 2021). Work engagement reveals individuals' involvement and performance in their jobs and positively affects them when working in a flexible environment (Zafari et al. 2019). Some critical aspects of employees' engagement are their age/generation and gender, which relates to a set of attitudes and behaviour that affect work-life experiences (Ciarniene&Vienazindiene 2018).

Figure 1 Conceptual Framework



Theoretical Framework

Job Demands-Resources Theory

Xanthopoulou et al. (2015) developed the job demands-resources (JD-R) model to explain that the presence of certain job resources can influence employee engagement. These resources include (a) job security, (b) role conflict and autonomy, and (c) supervisory support. Cooke et al. (2019) expressed that job demands can arise from the physical, social, organizational, or psychological elements of a job in form of time constraints, strenuous work, or heavy responsibilities. Joubert and Roodt (2019) described the job demands-resources (JD-R) model as one of the best efforts to construct work engagement on a personal level. Santhanam and Srinivas (2020) supported the notion that job demand is a stressor, but researchers can use the JD-R model to examine the factors that affect employee health and wellbeing, such as job burnout, and predict engagement outcomes. Using the JD-R theory, Bakker and Van Wingerden (2021) ascertained that personal and workplace resources affect employees' level of engagement on the job and that transformational leadership styles (a) support employee work engagement on days the job demands are high and (b) protect work engagement levels on days there is a high hindrance to job demands. Wang et al. (2020) stated that leaders who provide autonomous support to employees with high levels of physical or emotional job insecurity can increase employee engagement and boost work performance.

Harunavamwe et al. (2020) used the Job Demand-Resource model (JD-R) to examine the relationship between psychological capital, self-leadership, and job embeddedness factors on work engagement on the premise that many organizational leaders still struggle to implement effective engagement strategies. The authors concluded that business leaders who foster self-leadership strategies, provide psychological safety, and encourage closer links and fit among employees, improve employee engagement. Ngwenya and Pelser (2020) opined businesses that manage psychological capital well experience higher levels of employee engagement, job satisfaction, and sustainability. This theory complements Kahn's (1990) theory about the psychological conditions of engagement in the workplace.

Empirical Review

Ilevbare (2023) examined the qualitative multiple-case study which was to strategies manufacturing leaders in Nigeria in order to increase employee engagement. Using semi-structured interviews, company business reports, and employee survey action plans and reports, data were collected from eight manufacturing leaders in Southwest Nigeria with at least five years of leadership experience who successfully initiated and implemented employee engagement strategies. Five key themes emerged after using Yin's five-step data analysis process: a safe and inclusive work culture, supportive leadership, setting clear expectations, meaningful rewards and recognition, and frequent and effective communication practices. A key recommendation for manufacturing leaders is to engage employees in a way that encourages psychological safety, commitment and increases employee satisfaction at work. The implications for positive social change include the potential to increase employee engagement and performance as a major contributor to local communities' sustainability and development, which may lead to increased employment, higher business tax remittance, and local production of products and services that meet community needs.

Yebimodei, Amah, and Nkasiobi (2022) found that workplace flexibility such as telecommuting, flexi-time, and other kinds of remote work have a beneficial impact on productivity. Consequently, management was advised by the research to support teleworking in order to improve productivity and staff retention via the use of technology. Management should encourage telecommuting, which allows workers to work from home, in order to improve work-life balance and increase productivity. Flexi-time, which enables full-time workers to choose their own start and end times, should also be emphasized by management in order to promote a healthy work-life balance and increase productivity.

Mgbemena, Oraegbunam, Ohuonu and Goddy-Utazi (2022) investigated the flexible working and employee performance in manufacturing industries in Anambra State, Nigeria. The study aims to determine the effect of self-roistering; part time working; shift work, temporary contracts and flexi time on employee performance in manufacturing industries in Anambra State, Nigeria. Relevant conceptual empirical literature was reviewed. The study was anchored on Spill-over theory, Descriptive survey design was adopted. The study was carried out in Anambra State, Nigeria. The population of the study comprised 2090 employees of plastic manufacturing industries in Anambra State. The statistical formula devised by Borg and Gall was employed to determine the sample size of 408. The instrument used for the study was questionnaire. Face and content validity was adopted while, test re-test and Cronbach Alpha method were carried out to achieve reliability of the instrument. Simple percentage analysis was employed to answer the research questions and Multiple Regression analysis was in testing the hypotheses.

Results showed that Self-roistering has a significant positive influence on employee; part time working had a positive significant effect on employee performance in manufacturing industry and shift work had a positive significant effect on employee performance in manufacturing industry in Anambra State, Nigeria. The study conclude that flexible working had a positive significant effect on employee performance in manufacturing industry Anambra State. It was recommended among other that management should imbibe self-roistering as part of the flexible timing procedure; it tends to enhance the employees' abilities, interest and zealousness towards their jobs in the organization. It brings about good quality products too. Shift working systems should be adjusted according to the preferences of the employees so that their performance can be improved. Continuous changing of shifts should be avoided which otherwise affects employee performance.

Bhusan and Sar (2020) discussed the role of flexible working patterns in terms of improving employees' engagement and commitment towards organizations. It depicts the relationship between employees' engagement and organizational production improvement. Also, workplace flexibility is important for improving organizational performance by enhancing job satisfaction among the workers. However, the sedentary behavior and undisciplined nature by employees have created barriers for the use of workplace flexibility. On the other hand, excessive work pressure by employers during flexible working arrangements has negatively influenced the performance of employees. Apart from this, the thematic description of the research has revealed the role of workplace flexibility in improving work-life balance regarding employees(Aline, 2021).

Ngwenya and Pelser (2020) examined the effect psychological capital plays on employee engagement, job satisfaction, and employees' performance in the manufacturing sector of a developing market and opined psychological capital has a positive effect on employee engagement, job satisfaction, and employee performance, and that employee engagement significantly impacted

employee performance. Other predictors of work engagement are organizational commitment and team commitment (Nienaber & Martins, 2020). Most existing research on employee engagement has been focused on developed countries, large organizations, and western culture. Ismail et al. (2019) called for more research to continue to identify the antecedents of work engagement and the mediating factors that influence the association between work engagement and performance. Sampling several white- and blue-collar employees working at a multinational chemicals company in Indonesia, Noercahyo et al. (2021) concluded that job and organizational engagement had an impact on job satisfaction but not necessarily over organizational performance.

Methodology

A qualitative survey research design was adopted for this study. According to Pandey and Pandey (2021), survey research design is a technique for obtaining data from people through the use of a questionnaire, observations and interviews. In agreement, Frank (2019) explained that survey research design is suitable for collection of data based on the opinion of people. Therefore, the descriptive survey design is considered suitable for the study since questionnaire was used to collect data from staffs of selected manufacturing firms in Bayelsa State on investigating the influences of workplace flexibility on employee engagement.

The target population of the study consist of the staff of the selected manufacturing firms in Bayelsa State. There are one hundred and fifty (150) Manufacturing firms in Bayelsa State as at 2023 (Wikipedia, 2023). The accessible population for this study will consist of six (6) manufacturing firms in Bayelsa state. Ten (10) staffs from each of the manufacturing firms will be considered in this study to make up the total respondents of the study.

Table 1: Manufacturing firms in Bayelsa State

S/N	Manufacturing Firms	Staffs
1	Philland Engineering Services	10
2	Agso Enterprises	10
3	Ayekeme Ebise Engineering Construction company limited	10
4	Banwallo P Nigeria Enterprises	10
5	Bf Amies Electrotech company Nigeria	10
6	Senalux Paint	10
	Total	60

Method of Data Collection

The data for the study were gathered from primary sources. using a structured questionnaire which was administered to respondents to generate data from the selected manufacturing firms in Nigeria.

All the questionnaires administered were properly filled and returned. A structured questionnaire titled “Workplace flexibility and employee engagement” was used for data collection for the study. The instrument was developed by the researcher based on the research questions guiding the study and insight from the reviewed literature

The questionnaire was administered to the respondents by the researcher with the help of two research assistants who were briefed on the procedures to follow. Copies of the instrument were delivered to the respondents in their offices and a period of five working days was allowed for those who could not complete their instrument immediately. The research team collected the contacts of the respondents for reminders before revisiting them to collect completed copies of the questionnaire.

The Cronbach alpha test for internal consistency is used to test the reliability of the research questions. Cronbach’s Alpha statistical test as it is the most popular internal consistency reliability estimate. This high coefficient value indicated that the instrument is reliable for the study as recommended by Nwankwo, (2020); that a coefficient value of 0.70 and above is considered reliable for survey studies.

In the course of this study, the administered questionnaire was first cross-checked and certified by the supervisor of this study to ascertain the competence of the questions. Experts were also requested to examine the instrument relative to the appropriateness of the structure, instructions, item statements and content coverage and to make modifications as they deem fit freely. As a result of the validation, double-barreled items were separated and some item statements were recast.

The Cronbach's Alpha internal consistency coefficients will be calculated to test the reliability of the instrument.

Table 2: Reliability Test

Variables	Cronbach Alpha	Items
Employee engagement	0.962	5
Part-time jobs	0.966	5
Remote Work	0.968	5
Flexi-time	0.893	5

The table above shows the reliability of the administered questionnaire and there Cronbach’s alpha gave an alpha level of 0.893-0.968 which shows a very strong internal consistency. This means that questions in our questionnaire are reliable having a strong internal consistency valve.

Method of Data Analysis

Mean and standard deviation were used to answer the research questions and ascertain the closeness of the respondents’ means, Correlation Analysis and Regression Analysis will be used to test the null hypotheses at 0.05 level of significance. A null hypothesis was rejected where the P-value was less than or equal to the alpha level of 0.05, otherwise it was not rejected. P-value is the probability of obtaining a sample statistic as extreme or more extreme than the one that was actually observed under the assumption that the null hypothesis is true (Kelter, 2020).

Results

Table 3: Respondent Biodata

Variables	Categories	Frequency	Percentage
Gender	Male	43	75.4
	Female	14	24.6
	Total	57	100
Age	Less than 30 years	12	21.1
	31– 39 years	32	56.1
	41 – 49 years	5	8.8
	More than 49 years	8	14.0
	Total	57	100
Marital Status	Married	39	68.4
	Single	6	10.5
	In a relationship	12	21.1
	Total	57	100
Educational Level	SSCE	8	14.0
	B.Sc/B. A	24	42.1
	MSc.	19	33.3
	PhD.	7	12.3
	Total	57	100
Years of Experience	0-5 years	16	28.1
	6-10 years	32	56.1
	11 years and above	9	15.8
	Total	57	100

Source: Field work, (2024)

Table 3 shows the demographic characteristics of respondents for this study. Based on the results, male respondents were 75.4% and female respondents were 24.6%. This shows that there are more male workers than female workers in manufacturing industries in Bayelsa state.

Majority of the respondents 56.1% are within the age range of 31-39 which is the active working force, respondents within the age range of 41-49 are 8.8%, respondents less than 30 years are 21.1% while respondents aged more than 49 years are the least working age with 14%. The Marital status of respondents was considered, single respondents are 10.5%, while 68.4% respondents were married and 21.1% of the respondents are in a relationship.

The study in table 4.2 above also looked at educational qualification of respondents, most of the respondents with 42.1% had B.Sc./B.A. degree as their academic qualification, followed by those who

had MSc degree are 33.3%, while 14% had SSCE and other degrees and respondent with PhD (12.3%) are the least.

The study sought to know the years of experience of the respondents. Respondents with 6-10 years working experience are the highest with 56.1%, followed by respondents with 0-5 years working experience which are 28.1 % while respondents with 11 years and above working experience are the least with 15.8%.

Descriptive Analysis

Set of questions on workplace flexibility on employee engagement in manufacturing industry in Bayelsa state. Indicate the extent to which you agree with the following statements by using a scale of 1 – 5 where SA: Strongly Agree = 5, A: Agree = 4, I: Indecisive = 3, D: Disagree = 2, SD: Strongly Disagree = 1, and Tick the box which best describes your opinion of the statement.

Table 4: Research Question on Employee Engagement

S/N	QUESTIONS	SA (5)	A (4)	I (3)	D (2)	SD (1)	Total	Mean
1	Employee engagement is the readiness of workers to help their organization be successful by being flexible in different situations	45 (225)	7 (28)	3 (9)	2 (4)	0 (0)	57 (266)	4.47
2	Employees who felt alienated, excluded, or discriminated against when trying to participate at work perform poorly	42 (210)	10 (40)	3 (9)	2 (4)	0 (0)	57 (263)	4.61
3	Employee engagement boost creativity and innovation of employees	39 (195)	13 (52)	3 (9)	0 (0)	2 (2)	57 (258)	4.53
4	Good customer service and experience are caused by employee engagement	28 (140)	21 (84)	4 (12)	2 (4)	2 (2)	57 (242)	4.25
5	Employee engagement brings about better quality of work.	46 (230)	9 (36)	2 (6)	0 (0)	0 (0)	57 (272)	4.77

Source: Field work (2023)

The description in Table 4 on question on employee engagement. The highest mean score of 4.77 shows that most of the respondent (46) strongly agrees that Employee engagement bring about better quality of work. The table further shows that all the items (item 1 to item 4) were agreed upon having a mean score of 4.47, 4.61, 4.53 and 4.25 respectively. This implies that most of the respondents agree to the questions on employee engagement.

Table 5: Research Question on Part-Time Jobs

S/N	QUESTIONS	SA (5)	A (4)	I (3)	D (2)	SD (1)	Total	Mean
1	Good working time propel me to work effectively	51 (255)	4 (16)	2 (6)	0 (0)	0 (0)	57 (277)	4.47
2	Working on different shifts helps in job retainment	23 (115)	10 (40)	19 (57)	1 (2)	4 (4)	57 (218)	3.82
3	Part time employment provides less autonomy to the employees which affects the number of workload employee performs	32 (160)	21 (84)	3 (9)	1 (2)	0 (0)	57 (255)	4.47
4	Part time working determines employee performance in given period.	11 (55)	16 (64)	24 (72)	1 (2)	5 (5)	57 (198)	3.47
5	Part time job affects performance set aside to be completed in a given period	9 (45)	12 (48)	29 (87)	6 (12)	1 (1)	57 (193)	3.39

Source: Field work (2024).

The description in Table 5 on question on part-time jobs. The highest mean score of 4.47 shows that most of the respondents (56 respondents) strongly agrees that good working time propel them to work effectively. they also agreed that Part time employment provides less autonomy to the employees which affects the number of workload employee performs. The table further shows that all the items (item 2, 4 and 5) were agreed upon having a mean score of 3.82, 3.47 and 3.39 respectively having a mean score greater than 2.5. This implies that most of the respondents agrees to the questions on part-time jobs.

Table 6: Research Questions on Remote Work

	Item	SA (5)	A (4)	I (3)	D (2)	SD (1)	Total	Mean
1	Employees can face many challenges and difficulties while working from home	28 (140)	22 (88)	6 (18)	1 (2)	0 (0)	57 (248)	4.35
2	lack of communication, appropriate space to work, and social distancing/isolation are employee principal challenges working remotely	48 (240)	6 (24)	3 (9)	0 (0)	0 (0)	57 (273)	4.79
3	Remote work enables an increase in productivity and the facility to execute tasks	23 (115)	8 (32)	22 (66)	2 (4)	2 (2)	57 (219)	3.84
4	flexible working practices significantly influence employees' engagement and productivity	39 (195)	12 (48)	4 (12)	1 (2)	1 (1)	57 (258)	4.53
5	Employees can face many challenges and difficulties while working from home	41 (205)	8 (32)	4 (12)	1 (2)	3 (3)	57 (254)	4.46

Source: Field Survey (2024)

The description in Table 6 on question on remote work. The highest mean score of 4.79 shows that most of the respondents (28 respondents) strongly agrees that employees can face many challenges and difficulties while working from home. The table further shows that all the items (item 1, 3, 4 and 5) were agreed upon having a mean score of 4.35, 3.84, 4.53 and 4.46 respectively having a mean score greater than 2.5. This implies that most of the respondents agrees to the questions on remote work

Table 7: Research Questions on Flexi-Time

S/N	QUESTIONS	SA (5)	A (4)	I (3)	D (2)	SD (1)	Total	Mean
1	Flexibility time schedule offered encourages me to stay at work	23 (115)	12 (48)	11 (33)	7 (14)	4 (4)	57 (214)	3.75
2	Flexible timing has reduced employee turnover	12 (60)	9 (36)	31 (93)	5 (10)	0 (0)	57 (199)	3.49
3	Flexi time affects performance in terms of productivity	28 (140)	16 (64)	10 (30)	2 (4)	1 (1)	57 (239)	4.19
4	Flexi time helps in reducing absenteeism in as per number of days an employee attends work	44 (220)	8 (32)	5 (15)	0 (0)	0 (0)	57 (267)	4.68
5	Flexi time influences the number of hours an employee can perform his/her tasks	37 (185)	6 (24)	8 (24)	4 (8)	2 (2)	57 (243)	4.26

Source: Field Survey (2024)

The description in Table 7 on question on Flexi-time. The highest mean score of 4.68 shows that most of the respondents (44 respondents) strongly agrees that Flexi time helps in reducing absenteeism in as per number of days an employee attends work. The table further shows that all the items (item 1, 2, 3 and 5) were agreed upon having a mean score of 3.75, 3.49, 4.19 and 4.26 respectively having a mean score greater than 2.5. This implies that most of the respondents agrees to the questions on flexi-time.

Test of Hypotheses

This section examined the relationship between workplace flexibility and employee engagement in manufacturing industry in Bayelsa state. The study employe Pearson Product moment correlation analysis in testing the research hypotheses. The results of the correlation analysis are presented in the tables below

Table 8: Correlation result on the relationship between part-time jobs and employee engagement in manufacturing industry in Bayelsa state

Correlations

		Employee Engagement	Part-time job
Employee Engagement	Pearson Correlation	1	.945**
	Sig. (2-tailed)		.000
	N	57	57
Part-time job	Pearson Correlation	.945**	1
	Sig. (2-tailed)	.000	
	N	57	57

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Version 23

H₀₁: There is no significant positive relationship between part-time jobs and employee engagement in manufacturing industry in Bayelsa state

Table 8 above describes the Pearson correlation analysis on part-time jobs and employee engagement which shows that there is a positive significant relationship between part-time jobs and employee engagement ($r = 0.945$, $p = 0.000$). Thus, the alternative hypothesis (H₁) is accepted and proven to be true that there is a positive significant relationship between part-time jobs and employee engagement. This implies that increase in part-time jobs will lead to a significant increase in employee engagement in manufacturing industry in Bayelsa state

Table 9: Correlation result on the relationship between remote work and employee engagement among manufacturing industries in Bayelsa state

Correlations

		Employee Engagement	Remote Work
Employee Engagement	Pearson Correlation	1	.926**
	Sig. (2-tailed)		.000
	N	57	57
Remote Work	Pearson Correlation	.926**	1
	Sig. (2-tailed)	.000	
	N	57	57

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Version 23

H₀₂: There is no significant positive relationship between remote work and employee engagement in manufacturing industry in Bayelsa state

Table 9 above describes the Pearson correlation analysis on remote work and employee engagement. The result shows that there is a positive significant relationship between remote work jobs and

employee engagement ($r = 0.925$, $p = 0.000$). Thus, the null hypothesis is rejected and the alternative hypothesis (H_1) is accepted and proven to be true that there is a positive significant relationship between remote work and employee engagement. This implies that increase in remote work will lead to a significant increase in employee engagement in manufacturing industry in Bayelsa state

Table 10: Correlation result on the relationship between flexi-time and employee engagement in manufacturing industry in Bayelsa state

Correlations		Employee Engagement	Flexi-time
Employee Engagement	Pearson Correlation	1	.944**
	Sig. (2-tailed)		.000
	N	57	57
Flexi-time	Pearson Correlation	.944**	1
	Sig. (2-tailed)	.000	
	N	57	57

**. Correlation is significant at the 0.01 level (2-tailed).

Source: SPSS Version 23

H_{03} : There is no significant positive relationship between flexi-time and employee engagement in manufacturing industry in Bayelsa state

Table 10 above describes the Pearson correlation analysis on flexi-time and employee engagement. The result shows that there is a positive significant relationship between flexi-time and employee engagement ($r = 0.944$, $p = 0.000$). Thus, the null hypothesis (H_0) is rejected and the alternative hypothesis (H_1) is accepted and proven to be true that there is a positive significant relationship between flexi-time and employee engagement. This implies that increase in flexi-time will lead to a significant increase in employee engagement in manufacturing industry in Bayelsa state

Table 11: ANOVA result on workplace flexibility on employee engagement

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	348.792	3	116.264	188.342	.000 ^b
	Residual	32.717	53	.617		
	Total	381.509	56			

a. Dependent Variable: Employee Engagement

b. Predictors: (Constant), Flexi-time, Remote Work, Part-time job

Source: SPSS Version 23

The ANOVA results presented in table 4.10 shows that the statistically calculated F-value of 188.342 with a significant value of 0.00 at (0.05) level of significance, shows that workplace flexibility has a positive significant impact on employee engagement.

Discussion of findings

This study explores the influence of workplace flexibility on employee engagement in manufacturing industry in Bayelsa State. The specific objectives of this study is to determine the relationship between part-time jobs, remote work and flexi-time and employee engagement in manufacturing industry in Bayelsa State. The descriptive analysis shows that most of the respondent strongly agrees that Employee engagement bring about better quality of work. The respondents also strongly agrees that good working time propel them to work effectively. Most of the respondents strongly agrees that employees can face many challenges and difficulties while working from home

The correlation analysis shows that there is a positive significant relationship between part-time jobs and employee engagement. This finding is in agreement with that of Yebimodei, Amah, and Nkasiobi (2022) who found out that workplace flexibility such as telecommuting, flexi-time, and other kinds of remote work have a beneficial impact on productivity. Also, Mgbemena, et al., (2022) investigated the flexible working and employee performance in manufacturing industries in Anambra State, Nigeria. The result shows that part time working had a positive significant effect on employee performance in manufacturing industry

The study further shows that there is a positive significant relationship between remote work and employee engagement. Aline (2021) explored flexible working practices and their influence on employee's engagement and satisfaction within the workplace, considering workers from different age groups and genders. The result of the study shows that effectively applied, flexible working practices can be highly beneficial to employee engagement and satisfaction and improve organizations' outcomes

The correlation result further shows that there is a positive significant relationship between flexi-time and employee engagement. This coincides with the study of Wheatley (2016) who confirmed that flexitime promotes work-life balance and well-being for employees because it reduces work-life conflict, pressure and stress. Nazem and Seifi (2014) opined that the quality of the work-life and its dimensions significantly affected the productivity of employees. Chow and Keng-Howe's (2006) study found that the more flexible the schedule of employees, the higher their self-reported productivity

The ANOVA results revealed that workplace flexibility has a positive significant impact on employee engagement. This study showed that Employers are willing to transform their conventional company's policies and practices to fit the new generation's expectation and desires. Most of the respondents were satisfied with the current workplace work-life balance practices. They are able to manage their work and non-work job more flexibility especially for those who have a family. The work-life balance practices like flexi-time, job sharing and remote work were frequently used in the manufacturing industry to reduced their operation cost and at the same time provide flexibility for employees to arrange their work schedule to become more efficient and productive. In other words, they are also willing to scarify their time and energy and contribute their talents and knowledge, skills and abilities to help in enhancing the business performance as well as individual's productivity.

Summary of Findings

This study examined workplace flexibility on employee engagement in manufacturing industry in Bayelsa state. The target population of the study consist of (60) staff of the selected manufacturing firms in Bayelsa State. The study had a response rate of 95%. of which majority of the respondents are male. This shows that there are more male workers than female workers in manufacturing industries in Bayelsa state. Majority of the respondents 56.1% are within the age range of 31-39 which is the active working force, most of the respondent are married. The study also looked at educational qualification of respondents, most of the respondents with 42.1% had B.Sc./B.A. degree as their academic qualification. Majority of the respondent has a working experience of 6-10 years. The result from the correlation analysis shows that:

1. there is a positive significant relationship between part-time jobs and employee engagement
2. there is a positive significant relationship between remote work and employee engagement
3. there is a positive significant relationship between flexi-time and employee engagement.

Conclusions

The results revealed that workplace flexibility has a positive significant impact on employee engagement. The findings of this study concluded that part-time jobs, remote work and flexi-time has a positive significant relationship with employee engagement. This depicts improvement in the relationship between employees' engagement and workplace flexibility. Working flexibly guarantees that employees will have enough time for office activities and also with home duties, therefore helping employees to improve their performance. Also, workplace flexibility is important for improving organizational performance by enhancing job satisfaction among the workers. However, the sedentary behavior and undisciplined nature by employees have created barriers for the use of workplace flexibility. On the other hand, excessive work pressure by employers during flexible working arrangements has negatively influenced the performance of employees. Apart from this, the thematic description of the research has revealed the role of workplace flexibility in improving work-life balance regarding employees. Moreover, the narrative and relevant description have helped to highlight the role of workplace flexibility in enhancing employees' performance as a part of organizational improvement

When companies implement flexible policies on work conditions, there would be an increase in the performance of workers. Organisations will be able to retain the best and most talented employees, and employees ' work stress will be reduced to the minimum which might reduce work and family conflict. Furthermore, in this growing economy and competitive market, flexible working policies need to emerge as an important human resource strategy in order to support competitive advantage.

As a conclusion, this study had answered the objectives to determine the relationship between part-time jobs, remote work and flexible time with employee engagement in manufacturing industry in Bayelsa State. The results showed that the three variables positively correlated with employee engagement. The manufacturing industry is one of the essential country's economic backbones. Thus, the employee productivity played a great influence to the country's performance and therefore this study is to create awareness to the employers that the desire of employees has started to change. Employers need to engage more talented employees in their organization and need to change their conventional policies and practices to ingratiate the needs and desires of their employees

Recommendations

Based on the results of this study, it is recommended that:

1. employers and human resource managers promote greater alignment between flexible work arrangements e.g. part-time jobs and other human resource policies, such as recruitment and promotion policies, training and development policies, reward system policies, performance assessment policies, equal opportunity policies, and so on.
2. management should imbibe self-roistering as part of the flexible timing procedure; it tends to enhance the employees' abilities, interest and zealousness towards their jobs in the organization. It brings about good quality products too.
3. Remote working systems should be adjusted according to the preferences of the employees so that their performance can be improved.

Suggestions for further study

Further study should continue to identify the antecedents of work flexibility and the mediating factors that influence the association between work flexibility and performance.

References

- Abdullah, M. I., Huang, D., Sarfraz, M., Ivascu, L., & Riaz, A. (2021). Effects of internal service quality on nurses' job satisfaction, commitment and performance: Mediating role of employee well-being. *Nursing Open*, 8(2), 607-619.
- Abouelenin, M. (2021). *Gender Inequalities at the Work-Family Interface: Exploring the Role of Women's Resources and Cultural Norms in Modern-Day Egypt*. Lancaster University (United Kingdom).
- Adebayo, A. A., & Ibrahim, W. (2023). Flexible working arrangements and employees' job satisfaction in hospitality industry. *African Journal of Management and Business Research*, 11(1), 173-196.
- Armstrong M., & Taylor S., (2017). *Armstrong's handbook of human resource management practice*, 14th Edition, Kogan Page, London
- Attwood, S. (2018) How to successfully offer flexible working. CIPD. People management. Available at: <https://www.peoplemanagement.co.uk/voices/comment/how-to-successfullyoffer-flexible-working#gref>
- Austin-Egole, I. S., Iheriohanma, E. B. J., & Iheanacho, J. I. (2022). Flexible working arrangements (FWAS) and organizational performance: An empirical comparative analysis of production companies. *International Journal of Applied Research in Social Sciences*, 4(4), 131-146.
- Austin-Egole, I. S., Iheriohanma, E. B., & Nwokorie, C. (2020). Flexible working arrangements and organizational performance: An overview. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 25(5), 50-59.
- Avadhani, V. D., & B Menon, R. (2022). Development and standardization of the work-life balance scale for the insurance sector employees. *Cogent Business & Management*, 9(1), 2154994.

- Aziz-Ur-Rehman, M., & Siddiqui, D. A. (2019). Relationship between flexible working arrangements and job satisfaction mediated by work-life balance: Evidence from public sector universities employees of Pakistan. *Available at SSRN 3510918*.
- Badshah Hussain, N. I., Waseem, M., Farooq, N., & Khan, A. (2021). The mediating role of employee engagement between talent management practices and organizational commitment. *Multicultural Education*, 7(5), 291-298.
- Bakker, A. B., & Van Wingerden, J. (2021). Do personal resources and strengths use increase work engagement? The effects of a training intervention. *Journal of Occupational Health Psychology*, 26(1), 20–30.
- Bergson, H., Landes, D., & Grosz, E. (2022). *Creative evolution*. Routledge.
- Berkery, E., Moreley, M. J., Tiernan, S., Purtill, H., & Parry, E. (2017). On the uptake of flexible working arrangements and the association with human resource and organizational productivity outcomes. *European Management Review*, 14(2), 165-183.
- Berkery, E., Moreley, M. J., Tiernan, S., Purtill, H., & Parry, E. (2017). On the uptake of flexible working arrangements and the association with human resource and organizational productivity outcomes. *European Management Review*, 14(2), 165-183. <https://doi.org/10.1111/emre.12103>
- Berry, G. R., & Hughes, H. (2020). Integrating work–life balance with 24/7 information and communication technologies: The experience of adult students with online learning. *American Journal of Distance Education*, 34(2), 91-105.
- Bloomfield L., & Proffitt S. (2017) Flexible working: an employer's perspective. CIPD. People Management. Available at: <https://www.peoplemanagement.co.uk/experts/legal/flexible-working-employerperspective#gref>
- Botrel Vilela, A. (2021). *Impact of flexible working arrangements on employee's engagement and satisfaction: An exploratory study of employee age and gender* (Doctoral dissertation, Dublin, National College of Ireland).
- Bouncken, R. B., & Reuschl, A. J. (2018). Coworking-spaces: how a phenomenon of the sharing economy builds a novel trend for the workplace and for entrepreneurship. *Review of managerial science*, 12, 317-334.
- Brandewie, B., Kim, I. & Kim, M.-O. (2021). Assessing university police officers' uniforms and wearing experiences. *Research Journal of Textile and Apparel*, 2(3), 23-34.
- Brown, S. (2017). *Families in America* (Vol. 4). Univ of California Press.
- Bruns, A., & Pilkauskas, N. (2022). Juggling jobs and the kids: maternal multiple job holding and child behavior. *Community, Work & Family*, 25(5), 624-642.
- Byrne, Z. S. (2022). *Understanding employee engagement: Theory, research, and practice*. Routledge
- Carraro, F. (2021). Monitoring, controlling and reducing absenteeism cost—a Luxottica case analysis during the Covid-19 Pandemic.

- Adias, L. T. (2025). WORKPLACE FLEXIBILITY AND EMPLOYEE ENGAGEMENT IN MANUFACTURING INDUSTRY IN BAYELSA STATE. *GPH-International Journal of Business Management*, 8(7), 01-29. <https://doi.org/10.5281/zenodo.16731860>
- Chung, H., & Van der Lippe, T. (2020). Flexible working, work–life balance, and gender equality: Introduction. *Social indicators research*, 151(2), 365-381.
- Ciarniene, R., & Vienazindiene, M. (2018). Flexible work arrangements from generation and gender perspectives: Evidence from Lithuania. *Engineering Economics*, 29(1), 84–92
- Davidescu, A. A., Apostu, S. A., Paul, A., & Casuneanu, I. (2020). Work flexibility, job satisfaction, and job performance among Romanian employees—Implications for sustainable human resource management. *Sustainability*, 12(15), 6086.
- Davis, M. R. (2021). *Revenue sensitivity analysis: A quantitative exploration of the relationship between salesforce employee engagement and new business revenue generation* (Doctoral dissertation, Northcentral University).
- Dilmaghani, M. (2021). There is a time and a place for work: comparative evaluation of flexible work arrangements in Canada. *International Journal of Manpower*, 42(1), 167-192.
- Dorigo, W., Wagner, W., Albergel, C., Albrecht, F., Balsamo, G., Brocca, L., ... & Lecomte, P. (2017). ESA CCI Soil Moisture for improved Earth system understanding: State-of-the art and future directions. *Remote Sensing of Environment*, 203(2), 185-215.
- Frank, U. O. (2019). *Utilisation of forensic auditing investigation techniques for fraud detection in large scale business organisations in delta state, Nigeria* (Doctoral Dissertation, Nnamdi Azikiwe University, Awka).
- Garg, N., & Singh, P. (2020). Work engagement as a mediator between subjective wellbeing and work-and-health outcomes. *Management Research Review*, 43(6), 735– 752
- George, Y. E., Amah, E., & Nkasiobi, O. O. (2022). Workplace Flexibility and Employee Productivity: A Theoretical Perspective. *International Academy Journal of Management Annals Volume* 6(2), 01-15.
- Gordon, W., & Langmaid, R. (2022). *Qualitative market research: a practitioner's and buyer's guide*. Routledge.
- Govender, M., & Bussin, M. H. (2020). Performance management and employee engagement: A South African perspective. *SA Journal of Human Resource Management*, 18(1), 1-19.
- Harunavamwe, M., Nel, P., & Van Zyl, E. (2020). The influence of self-leadership strategies, psychological resources, and job embeddedness on work engagement in the banking industry. *South African Journal of Psychology*, 50(4), 507–519.
- Haydam, N. E., & Steenkamp, P. (2020). A methodological blueprint for social sciences research—the social sciences research methodology framework. *EIRP Proceedings*, 15(1), 56-73.
- Hultman, K. (2020). Building a culture of employee optimization. *Organization Development Journal*, 38(2), 35–48
- Ibiwoye, A., Mojekwu, J., & Dansu, F. (2020). Enterprise risk management practices and survival of small and medium scale enterprises in Nigeria. *Studies in Business and Economics*, 15(1), 68–82.

- Idowu, S. A. (2020). Role of flexible working hours' arrangement on employee job performance and retention in manufacturing industries in Agbara, Nigeria.
- Jenny, G. J., Bauer, G. F., Füllemann, D., Broetje, S., & Brauchli, R. (2020). Resources-demands ratio": Translating the JD-R-model for company stakeholders. *Journal of Occupational Health*, 62(1), e12101.
- Joubert, M., & Roodt, G. (2019). Conceptualising and measuring employee engagement as a role-related, multi-level construct. *Acta Commercial*, 19(1), 1–17.
- Kelter, R. (2020). Bayesian alternatives to null hypothesis significance testing in biomedical research: a non-technical introduction to Bayesian inference with JASP. *BMC Medical Research Methodology*, 20(4), 1-12.
- Kim, H., & Gong, Y. (2017). Effects of work–family and family–work conflicts on flexible work arrangements demand: a gender role perspective,' *International Journal of Human Resource Management*, 28(20), 2936–2956.
- Kim, J., Henly, J. R., Golden, L. M., and Lambert, S. J. (2020). Workplace flexibility and worker well-being by gender. *Journal of Marriage & Family*, 82(3), 892–910.
- Klopotek, M. (2017). The advantages and disadvantages of remote working from the perspective of young employees. *Organization & Management Quarterly*, 40(4), 39–49.
- Kossek, E. E., & Kelliher, C. (2023). Making flexibility more i-deal: Advancing work-life equality collectively. *Group & Organization Management*, 48(1), 317-349.
- Kossek, E. E., & Lautsch, B. A. (2018). Work–life flexibility for whom? Occupational status and work–life inequality in upper, middle, and lower-level jobs. *Academy of Management Annals*, 12(1), 5-36.
- Kotera, Y., Green, P., & Sheffield, D. (2020). Work-life balance of UK construction workers: Relationship with mental health. *Construction management and economics*, 38(3), 291-303.
- Kwon, O. N., Han, C., Lee, C., Lee, K., Kim, K., Jo, G., & Yoon, G. (2021). Graphs in the COVID-19 news: A mathematics audit of newspapers in Korea. *Educational Studies in Mathematics*, 1-18.
- Marin, R. (2021). Employee engagement: An actual theme, in a permanent evolution. *Journal of Human Resources Management Research*, 1(2), 1-15.
- Mary, C. O. (2024). Worktime flexibility and commitment of employees of brewing firms in south-south Nigeria. *Nigerian Journal of Management Sciences*, 25(1), 34-51.
- Messenger, J. (2018). Working time and the future of work. *ILO future of work research paper series*, 6(8), 33-37.
- Mohanty, S. K., & P, A. (2021). Identification of drivers of employee engagement in Indian power companies. *International Journal of Productivity & Performance Management*, 70(6), 1263–1290.

- Adias, L. T. (2025). WORKPLACE FLEXIBILITY AND EMPLOYEE ENGAGEMENT IN MANUFACTURING INDUSTRY IN BAYELSA STATE. *GPH-International Journal of Business Management*, 8(7), 01-29. <https://doi.org/10.5281/zenodo.16731860>
- Moon, K., Bergemann, P., Brown, D., Chen, A., Chu, J., Eisen, E. A., ... & Cohen, J. (2023). Manufacturing productivity with worker turnover. *Management Science*, 69(4), 1995-2015.
- Morgan, J., & Liker, J. K. (2020). *The Toyota product development system: integrating people, process, and technology*. CRC Press.
- Nelson, A. (2021). The effect of implementation of management support work environment, teamwork, and employee development to employee engagement with employee motivation as mediating variable. *Management and Economic Journal (MEC-J)*, 5(2), 131–142
- Ng, E. S., Posch, A., Köllen, T., Kraiczy, N., & Thom, N. (2022). Do “one-size” employment policies fit all young workers? Heterogeneity in work attribute preferences among the Millennial generation. *BRQ Business Research Quarterly*, 23409444221085587.
- Ngwenya, B., & Pelsler, T. (2020). Impact of psychological capital on employee engagement, job satisfaction and employee performance in the manufacturing sector in Zimbabwe. *SA Journal of Industrial Psychology*, 46(0), e1–e12.
- Nimon, K., & Shuck, B. (2020). Work engagement and burnout: Testing the theoretical continuums of identification and energy. *Human Resource Development Quarterly*, 31(3), 301–318
- Nnko, E. E. (2022). *Flexible work arrangements on performance of nurses in regional hospitals in Tanzania* (Doctoral dissertation, Jomo Kenyatta University of Agriculture And Technology).
- Nwankwo, I. N. (2020). Assessment of principals’ implementation of education management information systems in staff personnel management in secondary schools in South-East States of Nigeria. *Assessment*, 5(10), 35-47.
- Obuobisa-Darko, T. (2020). Ensuring employee task performance: Role of employee engagement. *Performance Improvement*, 59(8), 12-23.
- Ohemeng, F. L. K., Darko, T. O., & Amoako-Asiedu, E. (2020). Bureaucratic leadership, trust building, and employee engagement in the public sector in Ghana: The perspective of social exchange theory. *International Journal of Public Leadership*, 16(1), 17–40.
- Osam, E. K., & Shuck, B. (2020). *The work of employee engagement: Practical strategies for the workplace*. 355–366. Information Age Publishing.
- Pandey, P., & Pandey, M. M. (2021). *Research methodology tools and techniques*. Bridge Center.
- Piszczek, M. M., & Pimputkar, A. S. (2020). Flexible schedules across working lives: Age-specific effects on well-being and work. *Journal of Applied Psychology*, 2(1), 15-23.
- Prodanova, J., & Kocarev, L. (2021). Employees' dedication to working from home in times of COVID-19 crisis", *Management Decision*, doi: <https://doi.org/10.1108/MD-09-2020-1256>
- Radic, A., Arjona-Fuentes, J. M., Ariza-Montes, A., Han, H., & Law, R. (2020). Job demands–job resources (JD-R) model, work engagement, and well-being of cruise ship employees. *International Journal of Hospitality Management*, 88, 102518.

- Raza, H., Grzywacz, J. G., Linver, M., van Eeden-Moorefield, B., & Lee, S. (2021). A longitudinal examination of work–family balance among working mothers in the United States: Testing bioecological theory. *Journal of Family and Economic Issues*, 42(4), 601-615.
- Samuel, A. I. (2020). Role of flexible working hours' arrangement on employee job performance and retention in manufacturing industries in Agbara, Nigeria. *Economic Insights – Trends and Challenges*, 110(72), 23 – 37
- Santhanam, N., & Srinivas, S. (2020). Modeling the impact of employee engagement and happiness on burnout and turnover intention among blue-collar workers at a manufacturing company. *Benchmarking: An International Journal*, 27(2), 499–516.
- Saxena, R. (2018). Achieving work life balance through flexible work schedule: A conceptual study. *Asian Journal of Management*, 9(1), 307-312.
- Schweiger, S., Stouten, H., & Bleijenbergh, I. L. (2018). A system dynamics model of resistance to organizational change: The role of participatory strategies. *Systems Research and Behavioral Science*, 35(6), 658-674.
- Sebastiao, G. (2022). *Evaluating the impact of flexible working arrangements on employee satisfaction, motivation, and performance* (Doctoral dissertation, University of Pretoria).
- Sellers, T. (2021) Prioritizing employee well-being as we emerge from the pandemic. *Forbs*.
- Sim, J., Saunders, B., Waterfield, J., & Kingstone, T. (2018). Can sample size in qualitative research be determined a priori?. *International Journal of Social Research Methodology*, 21(5), 619-634.
- Singh, D. (2019). A literature review on employee retention with focus on recent trends. *International Journal of Scientific Research in Science and Technology*, 6(1), 425-431.
- Siswanto, S., & Lestari, A. E. (2019). The determinant of employee engagement. *Iqtishadia: Jurnal Ekonomi & Perbankan Syariah*, 6(2), 119–130.
- Spreitzer, G. M., Cameron, L., & Garrett, L. (2017). Alternative work arrangements: Two images of the new world of work. *Annual Review of Organizational Psychology and Organizational Behavior*, 4, 473-499.
- Sudjiwanati, S. & Pinastikasari, N. (2020). Employee performance and employee engagement towards job satisfaction. *Proceedings of the International Conference on Community Development (ICCD 2020)*, 477(1), 682–686.
- Tracy, S. J. (2019). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact*. John Wiley & Sons.
- Turner, P., & Turner, P. (2020). What is employee engagement?. Employee engagement in contemporary organizations: *Maintaining High Productivity and Sustained Competitiveness*, 1(2), 27-56.

- Adias, L. T. (2025). WORKPLACE FLEXIBILITY AND EMPLOYEE ENGAGEMENT IN MANUFACTURING INDUSTRY IN BAYELSA STATE. *GPH-International Journal of Business Management*, 8(7), 01-29. <https://doi.org/10.5281/zenodo.16731860>
- Ugargol, J. D., & Patrick, H. A. (2018). The relationship of workplace flexibility to employee engagement among information technology employees in India. *South Asian Journal of Human Resources Management*, 5(1), 40–55
- Uma, K. E., Obidike, P. C., Chukwu, C. O., Kanu, C., Ogbuagu, R. A., Osunkwo, F. O., & Ndubuisi, P. (2019). Revamping the Nigerian manufacturing sub-sector as a panacea for economic progress: Lessons from South Korea. *Mediterranean Journal of Social Sciences*, 10(4), 111–111.
- Van der Lippe, T., & Lippényi, Z. (2020). Co-workers working from home and individual and team performance. *New Technology, Work and Employment*, 35(1), 60-79.
- Van Geert, J. A. G. (2019). *Employee benefits: A qualitative research study on the perceptions of HR-professionals with a strategic point of view on the use of flexibility, communication and employee involvement* (Master's thesis).
- Wambui, N. M. (2022). Employee engagement and performance of non-academic staff in selected public universities in Kenya.
- Wang, D., Kan, W., Qin, S., Zhao, C., Sun, Y., Mao, W., Bian, X., Ou, Y., Zhao, Z., & Hu, Y. (2020). How authentic leadership impacts on job insecurity: The multiple mediating role of psychological empowerment and psychological capital. *Stress and Health*, 37(1), 60–71.
- Weideman, M., & Hofmeyr, K. B. (2020). The influence of flexible work arrangements on employee engagement: An exploratory study. *South African Journal of Human Resource Management*, 18(1), 1–18.
- Wheatley, D. (2017). Employee satisfaction and use of flexible working arrangements,' *Work, Employment & Society*, 31(4), 567–585.
- World Bank. (2022). <https://www.macrotrends.net/countries/NGA/nigeria/manufacturing-output>
- Xanthopoulou, D., Bakker, A. B., & Fischbach, A. (2015). Work engagement among employees facing emotional demands. *Journal of Personnel Psychology*, 12, 74– 84
- Yahya, K. K., Tee, C. W., & Johari, J. (2018). Employee engagement: A study on gen Y in the manufacturing industry. *Journal of Business and Social Review in Emerging Economies*, 4(1), 37-44.
- Yaslioglu, D. T. (2019). A systematic review of the correlates and outcomes of employee engagement. *Management Techniques for Employee Engagement in Contemporary Organizations*, 78-98.
- Youngstedt, S. D., Elliott, J. A., & Kripke, D. F. (2019). Human circadian phase–response curves for exercise. *The Journal of physiology*, 597(8), 2253-2268.
- Yuan, M., Lin, H., Wu, H., Yu, M., Tu, J., & Lü, Y. (2021). Community engagement in public health: a bibliometric mapping of global research. *Archives of Public Health*, 79, 1-17.

- Yuan, Z., Ye, Z., & Zhong, M. (2021). Plug back into work, safely: Job reattachment, leader safety commitment, and job engagement in the COVID-19 pandemic. *Journal of Applied Psychology*, 106(1), 62–70.
- Zacher, H., & Froidevaux, A. (2021). Life stage, lifespan, and life course perspectives on vocational behavior and development: A theoretical framework, review, and research agenda. *Journal of Vocational Behavior*, 126, 103476.
- Zafari, S., Hartner-Tiefenthaler, M., & Koeszegi, S. T. (2019). Flexible work and work-related outcomes: The role of perceived organizational alignment. *Management Revue*, 30(1), 63–92.