

Original Article

Exploring the Impact of Interactive Management Practices on Quality of Work-Life in Manufacturing Firms in Port Harcourt, **Rivers State**

Owhorji, Sunday¹, Margaret, Adebisi Jack²

Department of Business Administration, Faculty of Administration and Management, Rivers State University, Nkpolu-Oroworukwo, Nigeria.

1sunday.owhorji@ust.edu.ng

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Abstract - Our research aimed to explore the nexus between Interactive Management Practice (IMP) and Quality of Work-Life (QWL) in Port Harcourt manufacturing establishments in Rivers State. The study adopted a descriptive survey design and utilized a mixed-methods approach. Primary data was collected through questionnaires administered to a selected number of employees, while secondary data sources included books, gazettes, project materials, and automated sources. The uncut folk of workers in these firms was 23,535. Due to the large population size, the Taro the Yamane sampling tactic was exerted to determine a manageable sample size, resulting in 310 randomly selected workers. Proportionate sampling (22.30%) was used to determine the sample size reserved for each firm. The study harnessed the IMP on the QWL Scale. The research questions were based on a five-point Likert scale, which stretch from a very high extent to a very low extent, and simple tables, means, and grand means were exerted to scrutinize the information. Analytical routes were exercised to test hypotheses at a significance level of 0.05. The result evinces an appropriate and weighty interconnection between angles pertaining to quality of work-life, such as work-environment and job satisfaction, and interactive management courses, same as teamwork, social support, and employer-employee interrelation. The findings insinuate that, in sequence to augment joint effort, productivity, and profitability, employers should foster productive relationships with employees. The findings insinuate that, in sequence to augment joint effort, productivity, and profitability, employers should foster productive interrelations with employees. Employers ought to organize workshops and seminars to emphasize the importance of teamwork in achieving optimum output. Employers should exert interactive management routes, including employeremployee interconnections and teamwork.

Keywords - Interactive Management Practices, Employer-employee relationship, Team work, Work-environment, Quality of Work-Life, Job satisfaction.

1. Introduction

Research indicates that a firm's success is significantly impacted by its ability to motivate employees and attract top talent (Raluca-Elena Hurduzeu, 2015). However, many organizations face challenges in retaining their workforce due to insufficient efforts to create a supportive work environment and favorable working conditions. This neglect can result in disengagement and high turnover rates. To address this issue, businesses must prioritize



employee welfare and adopt innovative strategies to cultivate a culture of care and motivation, encouraging employees to be fully committed to their roles and dedicated to the organization's success.

According to Hian and Einstein (2010), the term Quality of Work Life (QWL) originated in 1972 during an international labor relations conference in Rome. However, some reports suggest it dates back to the 1960s in the United States when General Motors Firm and the United Auto Workers initiated a QWL sequence to enhance work attractiveness for employees. Robins (2014) described QWL as an organizational response to employees' needs, involving the creation of special logistics that enable workers to participate in decisions that improve their work-life quality.

The dynamics within the workplace, encompassing elements such as employer-employee relationships, teamwork, and job satisfaction, have increasingly become critical areas of focus in organizational research. In recent years, the manufacturing sector, particularly in emerging economies like Nigeria, has faced significant challenges in these areas. As industries in Port Harcourt, a key economic hub in Nigeria, continue to evolve, understanding the intricate relationships between these variables becomes essential for enhancing organizational effectiveness and employee well-being.

Historically, the Nigerian manufacturing sector has been characterized by fluctuating economic conditions, regulatory changes, and varying degrees of infrastructural development. These factors have influenced workplace dynamics and the overall work environment. The growth of this sector has been accompanied by both opportunities and challenges, particularly in fostering productive employer-employee relationships and promoting effective teamwork. Studies indicate that the Nigerian manufacturing sector has struggled with issues such as inadequate facilities, insufficient employee engagement, and inconsistent management practices (Adewale et al., 2021; Oladipo & Omole, 2022). These challenges have had a profound impact on work satisfaction, which in turn affects overall productivity and organizational success.

Recent literature has emphasized the importance of understanding the interplay between workplace relationships and employee outcomes. For instance, research by Okoro and Ukpere (2023) highlights that positive employer-employee interactions can significantly improve work satisfaction and institutional commitment. Similarly, teamwork has been identified as a crucial factor in enhancing the work environment and employee morale. However, there remains a gap in understanding how these relationships specifically manifest within the context of Nigerian manufacturing firms, where unique economic and cultural factors play a role.

The evolving nature of work environments in Nigeria, which are marked by increasing competition and a push towards more sophisticated manufacturing processes, necessitates a deeper investigation into these dynamics. The integration of modern management practices and the adoption of strategies to improve teamwork and work satisfaction are essential for addressing these challenges and fostering a more conducive work environment. By examining these relationships, this study aims to contribute valuable insights that can inform management practices and enhance organizational performance in the Nigerian manufacturing sector.

The Nigerian manufacturing sector, while vital to the country's economic growth, has long been plagued by issues related to employer-employee relationships, teamwork, and work satisfaction. Historically, the sector has faced challenges such as inconsistent management practices, inadequate facilities, and fluctuating economic conditions, all of which have influenced the quality of the work environment and employee satisfaction. These issues have been compounded by a lack of comprehensive research focusing on the specific dynamics of the Nigerian context.

A significant body of literature underscores the importance of positive workplace relationships and effective teamwork in enhancing work satisfaction and organizational performance. For example, studies indicate that strong employer-employee relationships are linked to higher work satisfaction and improved work environments. Similarly, research demonstrates that teamwork is crucial for creating a supportive work environment and boosting employee morale. However, much of this research has been conducted in contexts outside of Nigeria or in sectors that differ markedly from manufacturing.

In Nigeria, the manufacturing sector has unique challenges that affect workplace dynamics. According to recent studies, these challenges include the effects of inconsistent infrastructure, varying levels of employee engagement, and management practices that may not always align with contemporary best practices (Darcy Awah Achunguh, 2020). This disconnect between theoretical insights and practical realities highlights the need for more targeted research within the Nigerian manufacturing context.

The existing literature often lacks a specific focus on the interactions between employer-employee relationships, teamwork, and work satisfaction within Nigerian manufacturing firms. This gap in the research trajectory underscores the necessity of exploring these relationships in detail to understand better how they impact work satisfaction and the overall work environment. Addressing these gaps is crucial for developing strategies that are both effective and tailored to the unique challenges faced by Nigerian manufacturing firms. Thus, this study aims to fill this gap by providing empirical insights into these relationships, thereby offering practical recommendations for improving workplace dynamics in the sector.

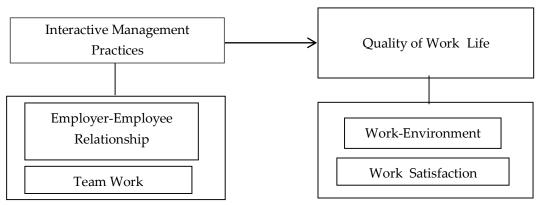


Fig. 1 Conceptual framework of interactive management practice and work-life quality with dimensions of Interactive management practices sourced from Thanushrii P.K. Sundararajan et al., (2020) and measures of Work-life quality sourced from Einstein (2010)

2. Literature Review

2.1. Theoretical Framework

The study is anchored on several relevant theories that explain the correlation between interactive management practices and the quality of work-life in organizations. The theories that underpin this research include the Social Exchange Theory (SET) by Homans (1958), Herzberg's Two-Factor Theory (1959), and the Systems Theory by Ludwig von Bertalanffy (1968). These theories provide a comprehensive understanding of how interactive management practices can influence the work environment, work satisfaction, and overall quality of work life.

The Social Exchange Theory (SET), proposed by George Homans in 1958, posits that organizational behavior is an exchange process where individuals seek to maximize benefits and minimize costs in their work and relational entanglements. In the context of the workplace, SET suggests that the interactions between employees and management are based on reciprocal exchanges of resources, such as support, trust, and rewards.

Herzberg's Two-Factor Theory, developed by Herzberg Frederick in 1959, posits that work satisfaction and dissatisfaction arise from two distinct sets of factors: motivators and hygiene factors. Motivators, such as recognition, achievement, and responsibility, contribute to work satisfaction, while hygiene factors, such as salary, firm policies, and working conditions, if inadequate, can lead to work dissatisfaction. In relation to this study, Herzberg's theory provides a framework for understanding how interactive management practices, such as employee involvement in decision-making, recognition programs, and fostering positive work correlations, can act as motivators that enhance employees' quality of work-life (Herzberg, Mausner, & Snyderman, 1959).

The Systems Theory, developed by Ludwig von Bertalanffy in 1968, views institutions as a system. In this perspective, each element of the organization, including workers, management practices, and work processes, interacts with one another to achieve the organization's objectives. The theory is highly relevant to this study, as it emphasizes the importance of coordinated interactions and integration among all levels of the organization. When applied to the concept of interactive management, the Systems Theory suggests that effective management practices, such as promoting teamwork, encouraging open communication, and facilitating collaboration between different departments, lead to a harmonious and productive work environment (Bertalanffy, 1968). This holistic approach underlines that enhancing the quality of work-life requires a comprehensive strategy that aligns all organizational subsystems toward common goals (Skyttner, 2005). However, the theory's limitation lies in its broad and abstract nature, which makes it challenging to apply directly to specific organizational issues without further operationalization and adaptation (Scott & Davis, 2007).

By integrating these theories, the study establishes a robust theoretical foundation for examining how interactive management practices influence work-life quality in manufacturing firms. The Social Exchange Theory offers insights into the reciprocal nature of employer-worker correlations, Herzberg's Two-Factor Theory elucidates the motivational factors that drive work satisfaction, and the Systems Theory provides a holistic perspective on how organizational components interact to create a conducive work environment. Together, these theories guide the study in investigating the extent to which management practices such as teamwork, social support, and effective communication contribute to improving workers' work-life balance, work satisfaction, and overall well-being within the manufacturing sector in Port Harcourt.

2.2. Conceptual Review

2.2.1. Concept of Interactive Management Practice

The concept of Interactive Management Practice (IMP) has garnered significant attention in recent years as organizations increasingly recognize the importance of fostering environments where collaboration, communication, and mutual engagement are emphasized. Interactive Management Practice refers to a management approach that prioritizes active participation, dialogue, and collaboration between management and workers at all levels of the organization. This practice integrates various management techniques that involve workers in decision-making processes, encourages open communication, and fosters strong interpersonal correlations that contribute to the overall productivity and well-being of the workforce. The underlying premise of IMP is that when workers are actively engaged and involved in the management process, they are more likely to be committed, satisfied, and motivated, which leads to better organizational outcomes (Yukl & Gardner, 2020).

Interactive Management Practice is rooted in the idea that management should be a participatory process where power is shared and workers' voices are valued in the decision-making process (McCauley & Fick-Cooper, 2019). Unlike traditional top-down management approaches that emphasize authority and control, IMP is characterized by mutual influence and collective problem-solving. Management no longer operates as a distant authority but as an active facilitator who works alongside workers to achieve common goals. This inclusive approach enhances trust, reduces resistance to change, and aligns workers' objectives with those of the organization (Dewettinck & van Ameijde, 2019). In this sense, Interactive Management Practice is not only about implementing specific

management techniques but also about cultivating a culture where interaction and dialogue are central to the organization's functioning.

2.3. Worker-Employer Correlation

The concept of the Worker-Employer Correlation refers to the dynamic, multifaceted interaction between workers and their employers within an organization. This correlation forms the cornerstone of organizational success, as it directly influences factors such as worker engagement, work satisfaction, productivity, and organizational loyalty. At its core, the worker-employer correlation encompasses the formal contractual agreements as well as the informal, psychological connections that exist between workers and their employers. Over the years, this concept has evolved from being merely transactional to being more relational and collaborative, reflecting broader changes in management practices and organizational culture (Dulebohn et al., 2017).

In its traditional form, the worker-employer correlation was primarily characterized by a top-down, hierarchical structure where workers were seen as subordinates tasked with executing the directives of their employers. This approach was largely rooted in the scientific management principles espoused by Taylor (1911), where efficiency and productivity were prioritized over worker well-being and development. However, as organizations have become more complex and as the workforce has grown more knowledgeable and diverse, the understanding of the worker-employer correlation has shifted towards a more interactive and mutually beneficial model. This transformation has been driven by theories such as the Leader-Member Exchange (LMX) theory, which emphasizes the quality of the correlation between supervisors and subordinates as a critical factor in determining worker outcomes (Graen & Uhl-Bien, 2018).

2.4. Team Work

The concept of teamwork is integral to modern organizational success and is widely recognized as a critical factor in achieving enhanced productivity, innovation, and work satisfaction. Teamwork can be understood as the collaborative effort of a group of individuals working together toward a common goal, where each member contributes their skills, knowledge, and perspectives to achieve collective outcomes that surpass what could be accomplished individually. It is a dynamic process that involves shared responsibilities, mutual support, effective communication, and the alignment of diverse talents and competencies to create a synergistic effect. The idea of teamwork is rooted in the belief that by pooling resources and working cohesively, teams can produce outcomes that are greater than the sum of individual efforts (Salas, Shuffler, Thayer, Bedwell, & Lazzara, 2015).

The theoretical foundation for teamwork is often linked to the work of Belbin (1981), who identified key roles that individuals typically assume within teams, such as the coordinator, implementer, and completer-finisher, among others. Belbin's research demonstrated that balanced teams with members taking on complementary roles tend to perform better than those lacking such diversity in roles. This underscores the importance of understanding and managing team dynamics effectively to leverage the strengths of each team member. Moreover, teamwork is not just about individuals contributing to a common task; it is about fostering a collaborative environment where communication, trust, and mutual respect thrive, enabling team members to work harmoniously toward shared objectives (Salas et al., 2015).

Effective teamwork is built upon several core principles, the first of which is communication. Clear, consistent, and open communication is essential for ensuring that all team members are on the same page regarding goals, tasks, and expectations (Smith, 2018). Communication in teamwork extends beyond simply sharing information; it involves actively listening, providing constructive feedback, and engaging in dialogue that facilitates problem-solving and decision-making. Teams that communicate well are better equipped to navigate challenges, resolve conflicts, and make informed decisions. The flow of information within a team plays a significant role in

coordinating efforts and ensuring that everyone remains aligned with the team's objectives (Katzenbach & Smith, 2015).

2.5. Social Support

The concept of social support encompasses the various forms of assistance, both emotional and practical, that individuals receive from their social networks, which can include family, friends, colleagues, and the broader community. Social support plays a crucial role in enhancing well-being, coping with stress, and maintaining mental health, making it a significant area of interest in psychology, sociology, and organizational studies. It is often defined as the perception or reality that one is cared for, has assistance available from others, and belongs to a supportive social network (House, Umberson, & Landis, 1988). Social support functions across multiple dimensions, including emotional support, which involves expressions of empathy, love, trust, and care; informational support, which involves the provision of advice, guidance, and information; and instrumental support, which includes tangible aid and services that directly help the individual in need (Cohen & Wills, 1985).

In organizational settings, social support has been widely studied due to its significant impact on worker well-being, work satisfaction, performance, and overall work-life quality. Research consistently shows that workers who perceive strong social support at work, whether from supervisors, colleagues, or the organization as a whole, experience lower levels of stress and burnout, higher levels of work satisfaction, and greater organizational commitment (Park et al., 2020). Social support within the workplace serves as a buffer against the negative effects of work demands and stressors, helping workers to cope more effectively with challenges and maintain a positive attitude toward their work (Ng & Sorensen, 2008). For example, when workers face high workloads or tight deadlines, emotional and practical support from colleagues can significantly alleviate their stress and help them manage their tasks more efficiently.

2.6. Work-Life Quality

The concept of Quality of Work-Life (QWL) refers to the overall well-being of workers within their work environment and is closely linked to their work satisfaction, performance, and productivity. It encompasses a broad range of factors, including work security, work satisfaction, work-life balance, compensation, safe working conditions, opportunities for personal growth, and healthy correlations with colleagues and supervisors. QWL is essentially the degree to which workers perceive their work as fulfilling and enriching rather than as merely a means to earn a living. The significance of QWL lies in its holistic approach to evaluating how work impacts an individual's quality of life, including both psychological and physical well-being.

The origins of the QWL concept can be traced back to the 1950s and 1960s, when researchers began to explore how work satisfaction and worker well-being influenced productivity and organizational success (Danna & Griffin, 1999). The human relations movement and the growing emphasis on worker-centric management practices highlighted the importance of creating work environments that foster both individual and organizational growth. Walton (1973), a significant proponent of QWL, proposed a framework that categorized QWL into various dimensions such as adequate and fair compensation, safe and healthy working conditions, opportunities for personal growth and development, social integration within the workplace, constitutionalism in work organization, work and total life space, and the social relevance of work. Walton's model remains influential in guiding both research and practical applications of QWL in contemporary workplaces.

Central to the concept of QWL is the idea that workers should not only be treated as resources to be maximized but also as individuals whose needs, aspirations, and well-being are integral to the organization's success (Sirgy et al., 2001). This perspective underscores the symbiotic correlation between an organization's effectiveness and the satisfaction and well-being of its workforce. A high QWL is associated with positive outcomes such as reduced absenteeism, lower turnover rates, increased worker engagement, and enhanced organizational commitment

(Rethinam & Ismail, 2008). In contrast, a poor QWL can lead to work dissatisfaction, high levels of stress, reduced productivity, and increased conflict within the workplace, all of which can detrimentally impact organizational performance.

One of the primary dimensions of QWL is work satisfaction, which refers to the level of contentment workers feel regarding their roles, responsibilities, and work environment. Work satisfaction is a critical determinant of QWL. It is influenced by factors such as the nature of the work, compensation, opportunities for career advancement, and the quality of correlations with supervisors and colleagues (Locke, 1976). Workers who are satisfied with their jobs are more likely to be motivated, perform better, and remain committed to their organizations. Conversely, dissatisfaction can lead to disengagement, poor performance, and, ultimately, higher turnover rates (Judge, Thoresen, Bono, & Patton, 2001).

2.7. Work Satisfaction

Work satisfaction refers to the degree to which workers feel fulfilled and content with their work, encompassing both emotional and cognitive dimensions. It is a complex and multifaceted concept that has been widely studied in organizational behavior, psychology, and human resource management. Work satisfaction reflects workers' attitudes toward their jobs. It is influenced by various factors, including the nature of the work, compensation, work environment, correlations with colleagues and supervisors, opportunities for growth, and organizational culture. Low work satisfaction can lead to burnout, absenteeism, and even physical health issues, such as cardiovascular problems. This connection emphasizes the importance of fostering work satisfaction not only for organizational success but also for workers' overall well-being.

Compensation and benefits play a significant role in determining work satisfaction. While monetary rewards are not the sole factor influencing satisfaction, they are crucial in providing workers with a sense of fairness and value for their contributions. Equity theory, developed and posits that workers compare their input-output ratios (effort and rewards) to those of others within the organization. Perceived inequities can lead to dissatisfaction, reducing motivation and performance. Thus, fair compensation systems that align with workers' expectations and industry standards are vital in maintaining and enhancing work satisfaction.

Work-life balance is another critical aspect of work satisfaction. In today's fast-paced work environment, workers increasingly value jobs that allow them to balance their professional responsibilities with personal and family life. Organizations that offer flexible working arrangements, such as remote work, flextime, and parental leave, tend to have more satisfied workers (Kossek, Valcour, & Lirio, 2014). Workers who perceive their employers as supportive of their need to balance work and life are more likely to feel satisfied with their jobs, leading to higher organizational commitment and lower turnover intentions.

2.8. Empirical Review

An empirical review of studies on interactive management practices and their impact on work-life quality, particularly within the context of manufacturing firms, reveals significant findings that are relevant to this research. This review examines studies that have explored various aspects, such as teamwork, employer-worker correlations, work satisfaction, and social support. By focusing on the methodologies, variables, and key findings of these studies, the discussion will provide insights into how these factors contribute to enhancing work-life quality in manufacturing settings.

A study by Akhavan, Ramezan, and Moghaddam (2021) explored the role of teamwork and collaborative management practices in improving work satisfaction and overall work quality in manufacturing firms in Iran. The study utilized a cross-sectional survey design and gathered data from 250 workers across five manufacturing companies. The primary variables included teamwork practices, work satisfaction, and organizational

performance. The researchers employed a structured questionnaire to assess workers' perceptions of teamwork and its influence on work satisfaction. Data were analyzed using multiple regression analysis, which revealed a significant positive correlation between effective teamwork and work satisfaction. The study concluded that fostering teamwork through interactive management practices can lead to improved worker satisfaction and, subsequently, enhanced work-life quality. These findings highlight the importance of teamwork as a critical factor in determining workers' perceptions of their work environment and overall well-being.

Similarly, a study by Eneh and Awara (2020) focused on the impact of employer-worker correlations on work-life quality within the Nigerian manufacturing sector. The researchers adopted a mixed-methods approach, combining quantitative surveys with qualitative interviews. The primary variables included the quality of employer-worker interactions, work satisfaction, and worker retention rates. The study sampled 300 workers from three large manufacturing firms in Port Harcourt, Rivers State. The quantitative data were analyzed using correlation and regression techniques, while the qualitative interviews provided in-depth insights into workers' experiences and expectations regarding management practices. The results indicated that positive employer-worker correlations significantly enhance work satisfaction, reduce turnover intentions, and promote a balanced work-life experience. The findings emphasized the role of supportive management practices and effective communication in creating a work environment where workers feel valued and motivated.

Further empirical evidence is provided by a study conducted, that investigated the effect of social support and work-life balance on work satisfaction in Pakistani manufacturing firms. This study employed a quantitative research design, surveying 400 workers from multiple firms. The study's variables included social support from supervisors and colleagues, work-life balance, and work satisfaction. Structural Equation Modeling (SEM) was used to analyze the correlations between these variables. The findings showed that social support, particularly from supervisors, had a substantial positive effect on workers' ability to manage work and personal responsibilities, leading to higher levels of work satisfaction. The research concluded that organizations should invest in building a supportive work culture where workers receive the necessary assistance from both peers and management to effectively balance their professional and personal lives.

In another study, Zhang and Liu (2019) examined the correlation between work satisfaction and work-environment quality in Chinese manufacturing firms. The researchers used a longitudinal design, gathering data over three years from 500 workers across multiple manufacturing sectors. The study focused on variables such as work environment conditions, work satisfaction, and productivity levels. Data were analyzed using hierarchical regression analysis, which demonstrated that improvements in the physical and psychological work environment significantly enhanced work satisfaction and overall productivity. The study concluded that providing a safe, comfortable, and well-managed work environment is essential for enhancing work satisfaction and work-life quality. The longitudinal nature of the study provided robust evidence linking work-environment enhancements to sustained improvements in worker well-being and organizational performance.

One notable study was investigated the impact of interactive management practices on work satisfaction and organizational commitment within the Indian manufacturing sector. The research utilized a quantitative approach, surveying 350 workers from various manufacturing firms. The study focused on variables such as participative management, feedback mechanisms, and worker involvement in decision-making. Through Structural Equation Modeling (SEM), the researchers found that participative management and effective feedback significantly enhanced work satisfaction and organizational commitment. Workers who felt involved in decision-making and received regular feedback reported higher levels of satisfaction and were more committed to their organizations. The study emphasized the importance of interactive management practices in fostering a positive work environment and improving overall work-life quality.

In a different context, the influence of social support and work-life balance on work satisfaction among manufacturing workers in South Korea was examined. Using a survey method, the study collected data from 400 workers and analyzed it through multiple regression techniques. The variables included social support from supervisors and peers, work-life balance, and work satisfaction.

The findings indicated that social support from supervisors had a significant positive effect on work satisfaction, while work-life balance moderated this correlation. Workers who perceived strong social support were better able to manage work-life demands, leading to increased work satisfaction. This study highlights the critical role of social support in enhancing workers' ability to balance work and personal life, thereby improving overall work-life quality.

Another relevant study explored the effects of work characteristics and managerial support on work satisfaction and worker performance in U.S. manufacturing firms. The researchers employed a cross-sectional survey design, collecting data from 300 workers. The key variables included work characteristics (e.g., task variety, autonomy), managerial support, work satisfaction, and worker performance.

The analysis revealed that work characteristics and managerial support significantly influenced work satisfaction, which in turn affected worker performance. Specifically, jobs with high task variety and autonomy, combined with supportive management practices, led to greater work satisfaction and enhanced performance. This study underscores the importance of designing jobs that provide workers with meaningful and engaging work while ensuring that managerial support is available to foster a satisfying work environment.

A study investigated the correlation between interactive management practices, work satisfaction, and worker turnover intentions in Brazilian manufacturing companies. Utilizing a mixed-methods approach, the researchers surveyed 350 workers and conducted follow-up interviews to gain deeper insights. The variables examined included interactive management practices (such as participatory decision-making and transparent communication), work satisfaction, and turnover intentions.

The results showed that interactive management practices positively impacted work satisfaction and significantly reduced turnover intentions. Workers who experienced inclusive management practices were more satisfied with their jobs and less likely to consider leaving the organization. This study highlights the strategic importance of interactive management in retaining workers and enhancing their overall work-life quality.

Lastly, a study explored the impact of teamwork and collaborative management on work satisfaction and productivity in Chinese manufacturing firms. The research employed a quantitative survey method, with data collected from 300 workers. The study focused on variables such as teamwork quality, collaborative management practices, work satisfaction, and productivity. The analysis revealed that effective teamwork and collaborative management practices had a significant positive effect on work satisfaction and productivity. Workers who participated in well-managed team activities and collaborative processes reported higher work satisfaction and demonstrated increased productivity. This research highlights the critical role of teamwork and collaboration in enhancing worker satisfaction and organizational performance.

These studies collectively illustrate the significant impact of interactive management practices on various aspects of work-life, including work satisfaction, work-life balance, and worker performance. The empirical evidence underscores the importance of participative management, social support, effective feedback, and a supportive work environment in enhancing workers' overall work-life quality. By focusing on these factors, organizations can create a more positive and productive work environment, leading to improved worker well-being and organizational success.

A recent study by Michael Manzo (2024) explored the interplay between interactive management practices, work satisfaction, and worker performance in the Nigerian manufacturing industry. The researchers used a mixed-methods approach, combining quantitative surveys and focus group discussions. The primary variables examined included interactive management practices, work satisfaction, worker engagement, and productivity.

Data were collected from 350 workers across six manufacturing firms and analyzed using both descriptive and inferential statistics. The findings indicated that interactive management practices, such as participative decision-making and regular feedback mechanisms, had a strong positive effect on work satisfaction and worker engagement. The study also found that higher work satisfaction led to increased worker performance and reduced absenteeism. The research underscored the importance of involving workers in decision-making processes and maintaining open communication channels to foster a positive work environment.

3. Methodology

This study utilizes a correlational survey. The population comprises all registered manufacturing firms in Rivers State, including both contract and non-contract staff. According to the Manufacturers Association of Nigeria, there are 21 registered manufacturing firms in Port Harcourt, with a total workforce of 1,390, categorized into Paint Manufacturing, Chemical Manufacturing, Drinks Manufacturing, and Glass Manufacturing. The research meticulously designed its sampling approach to ensure robust and reliable findings.

The study encompassed a diverse array of four categories of manufacturing firms within Rivers State, with a comprehensive sample drawn from a total of 1,390 workers. To achieve a representative sample, a simple random sampling technique was utilized to select 310 top and middle-level staff members. This method was deemed essential due to the nature of the study's variables and the unit of analysis, which focuses on organizational activities and necessitates the inclusion of reliable data sources (Greswell, 2009; Becete, 2011; Gusu & Eracleous, 2011).

Given that no universally optimal sampling method exists, the choice of technique was guided by the specific nature and objectives of the study (Baridam, 2001). A stratified sampling approach was employed to determine the sample size, ensuring a representative cross-section of the population. This approach recognizes that different strata within the population might have unique characteristics that are crucial for the study's objectives. Thus, the final sample of 310 was meticulously chosen to reflect the diversity within the manufacturing sector under investigation.

The data analysis was conducted using descriptive statistics, including tables, means, and standard deviations, to provide a clear overview of the research questions. The hypotheses were rigorously tested using the Pearson Product Moment Correlation Coefficient, executed through SPSS version 22 statistical software. This method facilitated a detailed examination of the relationships between variables, allowing for precise interpretation and validation of the study's findings based on the proposed hypotheses. The results derived from these analyses were then thoroughly interpreted to address the research questions and draw meaningful conclusions.

4. Results and Discussion

4.1. Research Question 1

The analysis reveals a strong correlation between the employer-to-worker rapport/relationship and the work environment of the case study. Both variables achieved high grand means, with the employer-worker relationship scoring an average of 4.00 and the work environment at 4.03, resulting in a final grand mean of 4.01. This indicates that a positive employer-worker relationship significantly enhances the work environment.

Table 1. Research question 1: Correlation between employer-worker relationship and work-environment

Item	Variables	Mean
1. Enhances effective communication between workers	Employer-Worker Relationship	4.06
	Work-Environment	3.98
2. Engenders competence development among workers	Employer-Worker Relationship	4.06
	Work-Environment	4.01
3. Promotes good health among the workers	Employer-Worker Relationship	3.95
	Work-Environment	3.96
4. Fosters increased productivity among workers	Employer-Worker Relationship	3.89
	Work-Environment	3.91
5. Fosters increased business growth	Employer-Worker Relationship	4.08
	Work-Environment	4.20
6. Increases motivation for better performance and loyalty	Employer-Worker Relationship	3.94
	Work-Environment	3.89
7. Enhances welfare and progress of the firm	Employer-Worker Relationship	4.00
	Work-Environment	4.23
Grand Mean	Employer-Worker Relationship	4.00
	Work-Environment	4.03
Overall Grand Mean		4.01

4.2. Research Question 2

Teamwork is also strongly correlated with the work environment. The grand means for teamwork and work environment were 4.12 and 4.03, respectively, leading to a final grand mean of 4.07. This suggests that effective teamwork positively impacts the work environment.

Table 2. Research question 2: Correlation between teamwork and work-environment

Item	Variables	Mean
1. Enhances effective communication between workers	Teamwork	4.22
	Work-Environment	3.98
2. Engenders competence development among workers	Teamwork	4.17
	Work-Environment	4.01
3. Promotes good health among the workers	Teamwork	4.16
	Work-Environment	3.96
4. Fosters increased productivity among workers	Teamwork	4.14
	Work-Environment	3.91
5. Fosters increased business growth	Teamwork	4.11
	Work-Environment	4.20
6. Increases motivation for better performance and loyalty	Teamwork	4.04
	Work-Environment	3.89
7. Enhances progress and welfare of the firm	Teamwork	4.02
	Work-Environment	4.23
Grand Mean	Teamwork	4.12
	Work-Environment	4.03
Overall Grand Mean		4.07

4.3. Research Question 3

The employer-worker relationship similarly correlates with work satisfaction. The average grand mean for the employer-worker relationship and work satisfaction were 4.01 and 4.07, respectively, with a final grand mean of 4.04. This reflects a strong link between positive employer-worker interactions and increased work satisfaction.

Table 3. Research question 3: Correlation between employer-worker relationship and work satisfaction

Item	Variables	Mean
1. Enhances effective communication between workers	Employer-Worker Relationship	4.06
	Work Satisfaction	4.12
2. Engenders competence development among workers	Employer-Worker Relationship	4.06
	Work Satisfaction	4.04
3. Promotes good health among the workers	Employer-Worker Relationship	3.95
	Work Satisfaction	4.05
4. Fosters increased productivity among workers	Employer-Worker Relationship	3.89
	Work Satisfaction	3.94
5. Fosters increased business growth	Employer-Worker Relationship	4.08
	Work Satisfaction	3.99
6. Increases motivation for better performance and loyalty	Employer-Worker Relationship	4.01
	Work Satisfaction	4.14
7. Enhances welfare and progress of the firm	Employer-Worker Relationship	4.00
	Work Satisfaction	4.23
Grand Mean	Employer-Worker Relationship	4.01
	Work Satisfaction	4.07
Overall Grand Mean		4.04

Table 4. Research question 4: Correlation between teamwork and work satisfaction

Item	Variables	Mean
1. Enhances effective communication between workers	Teamwork	4.22
	Work Satisfaction	4.12
2. Engenders competence development among workers	Teamwork	4.17
	Work Satisfaction	4.04
3. Promotes good health among the workers	Teamwork	4.16
	Work Satisfaction	4.05
4. Fosters increased productivity among workers	Teamwork	4.14
	Work Satisfaction	3.94
5. Fosters increased business growth	Teamwork	4.11
	Work Satisfaction	3.99
6. Increases motivation for better performance and loyalty	Teamwork	4.04
	Work Satisfaction	4.14
7. Enhances welfare and progress of the firm	Teamwork	4.02
	Work Satisfaction	4.23
Grand Mean	Teamwork	4.12
	Work Satisfaction	4.07
Overall Grand Mean		4.10

4.4. Research Question 4

Teamwork also shows a strong correlation with work satisfaction. The grand means for teamwork and work satisfaction were 4.12 and 4.07, respectively, resulting in a final grand mean of 4.10. This highlights that effective teamwork significantly contributes to work satisfaction.

4.5. Hypothesis Testing

Table 5. Correlation matrix with probability values

Variables	Employer-Worker Relationship	Teamwork	Work- Environment	Work Satisfaction
Employer-Worker Relationship	1	0.631	0.581	0.631
Probability (p-Value)	-	0.000	0.000	0.000
Teamwork	0.631	1	0.818	0.744
Probability (p-Value)	0.000	-	0.000	0.000
Work-Environment	0.581	0.818	1	0.704
Probability (p-Value)	0.000	0.000	-	0.000
Work Satisfaction	0.631	0.744	0.704	1
Probability (p-Value)	0.000	0.000	0.000	-

Firstly, the relationship between employer-worker interactions and the work environment demonstrates a moderate positive correlation, with a Pearson correlation coefficient of 0.581. This indicates that while there is a notable association between how well employers and workers interact and the quality of the work environment, it is not extremely strong. Essentially, improvements in employer-worker relationships contribute positively to the work environment. However, the impact is moderate, suggesting that while beneficial, these interactions alone are not the sole determinant of a good work environment.

In contrast, the relationship between teamwork and the work environment shows a very strong positive correlation, reflected in a Pearson correlation coefficient of 0.818. This result underscores the critical role of effective teamwork in fostering a positive work environment. High levels of collaboration and team cohesion are strongly associated with improvements in the work environment, indicating that when workers work well together, the work setting becomes significantly more supportive and productive.

Similarly, the correlation between employer-worker relationships and work satisfaction is strong, with a Pearson coefficient of 0.631. This finding highlights that a positive relationship between employers and workers is closely tied to higher levels of work satisfaction. When employers and workers maintain good communication and mutual respect, workers are more likely to feel satisfied with their jobs. This strong connection suggests that enhancing employer-worker interactions can lead to substantial improvements in work satisfaction.

Teamwork also has a strong positive relationship with work satisfaction, demonstrated by a Pearson correlation coefficient of 0.744. This suggests that effective teamwork is significantly associated with greater work satisfaction among workers. When workers experience high levels of teamwork, they are more likely to feel satisfied with their jobs, pointing to the importance of collaborative work practices in enhancing worker satisfaction.

Overall, these results indicate that both teamwork and employer-worker relationships are crucial factors in improving both the work environment and work satisfaction. While teamwork shows a very strong impact on both aspects, the employer-worker relationship also plays a significant role, albeit with slightly less intensity. These

findings suggest that organizations should focus on fostering effective teamwork and positive employer-worker interactions to achieve a better work environment and higher work satisfaction among their workers.

5. Conclusion

This research has statistically confirmed a strong positive correlation between IMP and workers' QWL in manufacturing firms in Port Harcourt, Rivers State. The findings also indicate that a positive employer-worker relationship and a structured teamwork environment contribute to a more enjoyable work atmosphere, leading to increased work satisfaction. The significance of interactive management practices in organizations, particularly in manufacturing firms, cannot be overstated. Based on these findings, it is evident that interactive management practices are essential for achieving a high work-life quality. Interaction fosters balanced communication and understanding among individuals in the organization. As parties interact, they become more acquainted with each other. If both parties behave honestly and consistently over time, engage in transparent information exchange, and participate jointly in decision-making, trust levels are likely to increase, reducing the need for coercive measures. The study reveals that all examined relationships are statistically significant, with varying degrees of strength. Specifically, the connection between teamwork and the work environment is particularly robust, reflecting a very strong positive correlation. This suggests that improvements in teamwork significantly enhance the overall work environment. Similarly, the relationships between teamwork and work satisfaction, as well as between the employer-worker relationship and work satisfaction, are also strong. These findings underscore the critical role of positive interpersonal interactions and effective teamwork in fostering work satisfaction.

The correlation between employer-worker relationships and the work environment, while moderate, still highlights the importance of nurturing these interactions to enhance the work setting. This moderate relationship indicates that while employer-worker dynamics contribute to a better work environment, other factors also play a role.

5.1. Recommendations

Based on these findings, several recommendations are proposed to improve organizational outcomes in Nigerian manufacturing firms:

- Given the very strong correlation between teamwork and both the work environment and work satisfaction,
 firms need to invest in developing effective teamwork strategies. This could include team-building activities,
 collaborative projects, and creating a culture that values cooperation and mutual support. These initiatives will
 likely lead to a more positive work environment and higher levels of work satisfaction among workers.
- The strong relationship between employer-worker interactions and work satisfaction highlights the need for
 improved communication and support systems. Firms should focus on fostering open dialogue, providing
 constructive feedback, and recognizing worker contributions. By addressing these aspects, firms can enhance
 work satisfaction and, indirectly, the work environment.
- Although the relationship between employer-worker interactions and the work environment is moderate, it is
 still significant. This suggests that while improving employer-worker relationships can positively impact the
 work environment, additional measures are necessary. Firms should consider investing in better facilities,
 ensuring a safe and comfortable working environment, and addressing other environmental factors that
 contribute to worker well-being.
- The strong correlations between work satisfaction and both teamwork and the work environment suggest that
 initiatives aimed at improving work satisfaction should focus on both of these areas. Regular surveys and
 feedback mechanisms could be employed to monitor work satisfaction levels and identify areas for
 improvement.

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