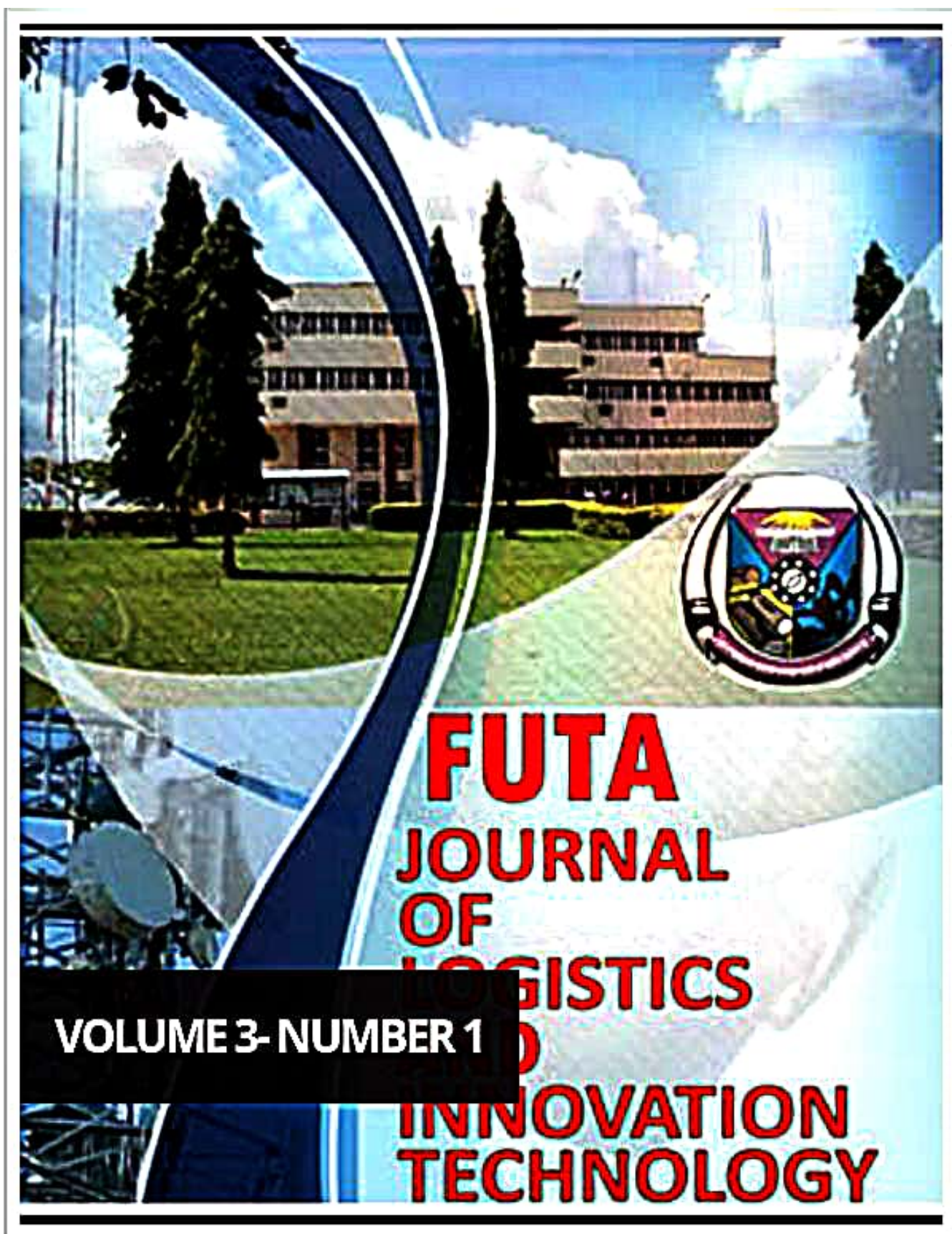




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(index.html)

# Structured Project Planning and Scheduling and Healthcare Providers' Job engagement in Federal Medical Centers in Southwest Nigeria

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## Abstract

*This study examines the effect of structured project planning and scheduling on healthcare providers' job engagement in Federal Medical Centers (FMCs) in South-West Nigeria. Structured project planning and scheduling are critical tools in ensuring efficient resource allocation, clear role definitions, and timely completion of healthcare projects. These elements are pivotal for enhancing job engagement, which encompasses commitment of healthcare providers to their work. Using a cross-sectional survey design, from a population of 3942, data were collected from 342 respondents across FMCs in the South-West using structured questionnaires. Statistical analysis, including regression analysis, was used to examine the effect of structured project planning and scheduling on health providers' job engagement. Regression analysis was employed as method of statistical analysis. The findings reveal that structured project planning and scheduling significantly and positively predict healthcare providers' engagement ( $\beta = 2.787$ ,  $t = 50.355$ ,  $p < 0.005$ ). The study concludes that structured project planning and scheduling are fundamental to promoting job engagement among healthcare providers. It recommends that healthcare administrators in FMCs adopt tailored planning and scheduling tools, incorporating real-time updates to address the dynamic nature of healthcare operations. This approach is critical for maintaining high standards of patient care and improving overall institutional performance.*

**Keywords:** Structured Project, Planning, Scheduling, Healthcare Providers, Job engagement, Federal Medical Centers

## 1. 0 Introduction

Project management principles, with particular reference to planning and scheduling, are essential for managing healthcare projects effectively. Applying these principles ensures that healthcare initiatives are executed efficiently, resources are utilized optimally, and project goals are achieved within specified timelines. Essentially, project planning and scheduling play a significant role in shaping the work environment and influencing healthcare providers' engagement levels (Mosadeghrad, 2014; Graham, 2012; Szilvassy & Širok, 2022).

South-West Nigeria faces challenges in terms of healthcare workforce dynamics, such as unequal distribution of healthcare professionals as a result of professional staff shortages and high workload pressures (Aluko, Anthea & Modeste, 2019; Johnson, *et al.*, 2022; Nwobodo, *et al.*, 2023). As a result, healthcare providers at FMCs may face job discontent, burnout, and reduced morale. Managing these difficulties necessitates ways to increase employee job satisfaction. Thus, engaging healthcare professionals will be critical for addressing these difficulties and developing effective mechanisms for the efficient delivery of healthcare services.

Effective project planning and management are critical components in the healthcare sector, directly influencing the efficiency of project management operations and the engagement levels of healthcare workers (EPAM SolutionsHub, 2023). Effective project planning scheduling will enable FMCs to allocate resources efficiently, including personnel, equipment, and facilities. By aligning resources with operational needs and patient demands, healthcare organizations can improve workflow processes and minimize challenges affecting staff level of engagement (Szilvassy & Širok, 2022).

Structured project planning involves defining objectives, allocating resources, and setting timelines, while scheduling ensures that tasks are executed in a timely and coordinated manner (Wrike Team, 2023). In healthcare settings, these processes are essential for managing complex workflows, coordinating multidisciplinary teams, and ultimately delivering high-quality patient care (Wrike Team, 2023; EPAM SolutionsHub, 2023). According to Shanafelt, Goh and Sinsky (2021), healthcare providers' job engagement refers to their commitment, involvement, and satisfaction in their roles. Thus, increased level of engagement by healthcare workers is associated with improved patient outcomes, reduced turnover rates, and enhanced organizational performance. Conversely, poor engagement can lead to burnout, decreased productivity, and compromised patient care (Simpson, 2009; Salyers, Bonfils, Luther, Firmin, *et al.*, 2017; West, Dyrbye, Erwin, & Shanafelt, 2016).

In Federal Medical Centers (FMCs) in South-West Nigeria, the integration of structured project planning and scheduling is particularly pertinent (Bello, Neill, Jegede, *et al.* 2024; Kabiru, Jumare, Farhad, Iyeme, *et al.*, 2024). These centers often face challenges such as resource constraints, high patient loads, and infrastructural limitations (Oyekale, 2017; Sampson, Umar, Obi-Jeff, *et al.*, 2024). Implementing effective project management practices can help in optimizing resource utilization, streamlining processes, and improving staff morale and engagement. Invariably, healthcare providers play a crucial role in providing high-quality care and improving patient outcomes. Nonetheless, several factors can influence their participation and efficacy, such as project planning and scheduling within Federal Medical Centers (FMCs) in South-West Nigeria. Ineffective project planning and scheduling can thereby lead to increased workload and stress among healthcare providers in FMCs. This is because poorly managed projects can result in inefficient resource utilization, forcing healthcare providers to work longer hours or handle excessive patient loads, affecting their engagement and job satisfaction (Aluko *et al.*, 2019; Ekenna *et al.*, 2020; Welcome, 2011).

Studies have shown that structured project management procedures in healthcare can bring significant improvements in service delivery and staff satisfaction (Bodenheimer & Sinsky, 2014; West & Dawson, 2012; World Health Organization (WHO), 2006). Additionally, Kerzner (2017) highlighted that effective planning and scheduling are crucial for coordinating complex healthcare projects and ensuring that they meet their objectives within the set timelines and budgets. Another study emphasized the importance of project management in healthcare, noting that it guarantees that specific goals and objectives are delivered within timelines and allocated resources (EPAM SolutionsHub, 2023; Silva, Farias & Nascimento, 2020; Shirley, 2016; World Health Organization (WHO), 2018).

Furthermore, despite the established importance of structured project planning with scheduling, many FMCs in South-West Nigeria continue to experience inefficiencies in healthcare delivery and low levels of healthcare providers' job engagement (Oyekale, 2017; Kabiru *et al.*, 2024). These challenges are often attributed to inadequate project management practices, leading to poorly coordinated activities, resource misallocation, and staff dissatisfaction. Subsequently, the lack of structured project planning and scheduling can result in overlapping duties, unmet deadlines, and increased workload stress among healthcare providers. This environment fosters disengagement, negatively impacting the quality of patient care and overall organizational performance.

Addressing the above stated problem requires a comprehensive understanding of how structured project planning and scheduling influence healthcare providers' job engagement. By investigating this relationship, this work aims to create insights that can inform the development of effective project management strategies tailored to the unique challenges of FMCs in South-West Nigeria. Such strategies are essential for enhancing healthcare providers' engagement, improving service delivery, and achieving better patient outcomes. Therefore, the major objective of this paper is to examine the effect of structured project planning and scheduling on healthcare providers' job engagement in Federal Medical Centers, South-West Nigeria. The study hypothesis could be therefore stated as: H<sub>1</sub>: Structured project planning and scheduling have significant effect on healthcare providers' job engagement in Federal Medical Centers in South-West Nigeria.

## 2.0 Literature Review

Project planning defines a project's scope, objectives, and processes, including resource allocation, deadlines, and risk identification (De Rosis *et al.*, 2022; PMBOK, 2021; Sawyer-George & Friday, 2023). Project scheduling involves arranging tasks sequentially within a set timeframe to achieve goals efficiently (PMBOK, 2021). Both are critical to project management, particularly in healthcare, where they significantly influence practitioner performance and

engagement (Hughes, 2023). Effective planning and scheduling include outlining goals, deliverables, tasks, and boundaries (PMBOK, 2021); allocating resources like personnel, equipment, and budgets (Kerzner, 2019); identifying risks and strategies to mitigate them (Hillson & Simon, 2020); and decomposing the scope of work into manageable tasks (PMI, 2021). Tools like Gantt charts visually represent project timelines (Lock, 2020), while step-by-step techniques identify critical tasks to prevent delays (Nicholas & Steyn, 2020). These structured approaches ensure efficiency and improve outcomes in healthcare service delivery.

Healthcare providers' engagement refers to their emotional and psychological commitment to their work and organization, encompassing job satisfaction, motivation, and organizational commitment (Bakker & Demerouti, 2017). Clear project plans and schedules reduce uncertainty and workload stress, fostering job satisfaction among healthcare workers (Aarons *et al.*, 2015). Well-structured plans enhance communication and coordination, promoting collaboration and minimizing misunderstandings (Walker, 2019). Effective planning and scheduling optimize resource utilization, reduce downtime, and improve efficiency in healthcare delivery (Kerzner, 2019).

Furthermore, empirical studies underscore the importance of project scheduling in healthcare engagement. Adisa *et al.* (2020) emphasized the role of project management practices in improving Nigerian hospital services, highlighting the need for skilled managers and staff training. Aarons *et al.* (2015) found that well-planned projects positively impact job performance and employee engagement by fostering a supportive organizational climate. Walker (2019) examined project management systems, including Gantt charts and critical path methods (CPM), concluding that these tools enhance task clarity, resource allocation, and overall project outcomes in healthcare. These findings emphasize the vital role of project planning and scheduling in boosting healthcare providers' engagement and improving service delivery.

Effective project planning and scheduling are crucial for executing healthcare projects, particularly in resource-constrained settings like Federal Medical Centers in South-West Nigeria. These practices enhance job satisfaction, provider engagement, and healthcare efficiency. However, challenges such as limited financial and human resources hinder effective planning and execution (Adisa *et al.*, 2020). The complexity of healthcare delivery, requiring meticulous planning to address diverse patient needs, further complicates these efforts (Harrison & Lee, 2020). Additionally, strict compliance with health regulations and policies can reduce flexibility in implementing project plans (Sewell *et al.*, 2017). Overcoming these obstacles is essential for improving the quality and efficiency of healthcare services in such settings.

## **2.2 Theoretical Approaches**

### **Human Capital Theory (HCT)**

The Human Capital Theory (HCT), developed by Gary S. Becker (1964) and Theodore W. Schultz (1961), emphasizes that individuals' knowledge, skills, and abilities are valuable assets that enhance productivity and generate economic value. In healthcare, human capital includes professional qualifications, clinical expertise, and research capacity. Applying HCT to Federal Medical Centers (FMCs) in South-West Nigeria highlights the importance of structured project planning and scheduling in aligning institutional goals with human capital development.

Structured project planning and scheduling enhance organizational efficiency by defining objectives, allocating resources, and establishing timelines. These practices align with HCT principles by creating frameworks where human capital can be optimally developed and utilized. Investing in healthcare providers through advanced education, conferences, and collaborative research ensures they are prepared to meet the demands of complex healthcare environments.

Integrating human capital development into project planning and scheduling improves the relevance of training programs by addressing performance gaps identified through real-time feedback. For example, patient surveys and staff input can reveal deficiencies in clinical or administrative processes. Targeted training initiatives informed by this data bridge competency gaps, embodying HCT's emphasis on continuous human capital investment to drive organizational outcomes.

Therefore, for FMCs, structured project planning and scheduling amplify the impact of human capital investments by addressing systemic inefficiencies and optimizing workforce performance. By aligning human capital initiatives with project management systems, administrators can foster continuous improvement, enhance job satisfaction, and achieve

operational excellence. Clear schedules reduce stress by defining roles and expectations, while professional development opportunities empower staff to adapt to challenges and innovate.

Embedding human capital development into structured project planning ensures it is a core operational strategy. Scheduling training during downtime or aligning research with clinical goals integrates professional growth with institutional priorities. Moreover, structured planning provides a foundation for evaluating the return on investment in human capital, enabling healthcare managers to measure the impact of training on job engagement and patient outcomes. This approach ensures that human capital development is both strategic and impactful, contributing to long-term organizational success.

### 3. 0. Methodology

This study examines the effect of structured project planning and scheduling on healthcare providers' job engagement in Federal Medical Centers (FMCs) in South-West Nigeria. A cross-sectional survey design was employed to collect data directly from the target respondents, who were drawn from various departments within the selected FMCs. This design is particularly suitable for establishing causal relationships among variables and for gathering information from a defined population to describe its current state using the variables under investigation (Hair et al., 2017).

The study population comprised all staff categories within the FMCs, including doctors, nurses, administrative staff, and pharmacy personnel. The FMCs involved in the study include Federal Medical Centre Owo, Federal Medical Centre Ido-Ekiti, Federal Medical Centre Abeokuta, and Federal Medical Centre Ebute-Meta. As of October 2023, the total staff population across these centers was 3,942, as shown in Table 3.1. The study sample was drawn from this population, representing the diverse workforce within these institutions.

**Table 1: Staff Strength Distribution**

| Staff Category | FMC, IdoEkiti | FMC, Owo   | FMC Ebute-Meta | FMC, Abeokuta | Total       |
|----------------|---------------|------------|----------------|---------------|-------------|
| Admin          | 203           | 187        | 398            | 275           | <b>1063</b> |
| Doctors        | 87            | 98         | 178            | 127           | <b>490</b>  |
| Nurses         | 462           | 403        | 705            | 490           | <b>2060</b> |
| Pharmacist     | 61            | 78         | 107            | 83            | <b>329</b>  |
| Grand Total    | <b>813</b>    | <b>766</b> | <b>1388</b>    | <b>975</b>    | <b>3942</b> |

**Source:** Human Resource Departments of the Respective Hospitals, 2023

Taro Yamane (1967) sample size determination formula was employed to arrive at the number of respondents that can form a good representation of the entire population. Calculation of the sample size using Yamane (1967) formula is shown below:

$$n = \frac{N}{(1 + N(e)^2)}$$

Where n= the sample size

N= population size

e= error term (acceptable)

$$n = \frac{3942}{(1+3942(0.05)^2)}$$

$$n = 363$$

Therefore, the sample size was 363, which was used as a basis for allotting sample distribution across the selected Federal Medical Centres by applying Kumar (1976) sample size proportion determination formula i.e.

Nh=

Where: Nh= Stratum allocation

n= sample size

N= overall population

NH= Stratum population

**Table 2: Sample Size Distribution**

|          | FMC, Ido  | FMC ,Owo  | FMC, Ebute Meta | FMC, Abeokuta | Total      |
|----------|-----------|-----------|-----------------|---------------|------------|
| Admin    | 18        | 16        | 37              | 24            | 95         |
| Doctors  | 8         | 10        | 15              | 12            | 45         |
| Nurses   | 43        | 38        | 65              | 44            | 190        |
| Pharmacy | 6         | 8         | 11              | 8             | 33         |
| Total    | <b>75</b> | <b>72</b> | <b>128</b>      | <b>88</b>     | <b>363</b> |

**Source:** Author's Computation, 2024

Primary Data were collected through a self-developed questionnaire using a five-point Likert scale, measuring responses from strongly agree to strongly disagree. Reliability was ensured through the test-retest method and Cronbach's Alpha, which yielded a reliability index shown in table 3.3, indicating high consistency and reliability.

**TABLE 3. RELIABILITY STATISTICS OF RESEARCH VARIABLES**

| S/N | Variables                                          | No. of Items | Cronbach's Alpha | Composite Reliability | Remark   |
|-----|----------------------------------------------------|--------------|------------------|-----------------------|----------|
| 1   | Structured Project Planning and Scheduling (PrEng) | 7            | 0.798            | 0.778                 | Reliable |
| 2   | Health Providers' Job Engagement (PrPSc)           | 5            | 0.717            | 0.721                 | Reliable |

Sources: Pilot Survey 2024

Descriptive and inferential statistical analyses were conducted using IBM SPSS version 27. Descriptive statistics, including percentage counts, means, and standard deviations, summarized respondents' demographics and questionnaire responses. Regression analysis examined the effect of structured project planning and scheduling on healthcare providers' job engagement. Significant relationships were determined based on p-values: if below 0.05, the null hypothesis was rejected; otherwise, it was not. This approach clarified the strength and significance of variable relationships, providing valuable insights into the study's core objectives.

### 3.1 Model Specifications for the Hypothesis

$PrEng = f(PrPSc)$

$PrEng = \beta_0 + \beta_1 PrPSc + \epsilon$

Where:

$PrEng$  = health providers' job engagement (Dependent variable)

$\beta_0$  = Intercept of the model.

$\beta_1$  = Estimate of the parameter of the independent variable in the model of the slope.

$\epsilon$  = Error term.

$PrPSc$  = Structured Project Planning and Scheduling (Independent variable)

The a priori expectation is as; thus,  $\beta_1 > 0$ . According to the a priori anticipation about the link stated above, feedback alignment in project management have a significant positive effect on operational efficiency in healthcare service delivery of medical centres. The calculated value would be larger than or equal to the critical value for the null hypothesis to be rejected; otherwise, the null hypothesis is accepted at any level of significance.

## 4. 0 Results and Discussion

Table 4 shows a 94.22% response rate, with 342 of 363 questionnaires returned. This high participation rate ensures the instrument's validity and strengthens the study's reliability.

**Table 4.1** **Response Rate**

|              | Frequency | Percent |
|--------------|-----------|---------|
| Administered | 363       | 100.0   |
| Returned     | 342       | 94.22   |
| Non-returned | 21        | 5.78    |
| Total        | 363       | 100.0   |

Source: Field Survey, 2024

#### 4.1 Analysis of Respondents Demographic Data

This section summarises the frequency distribution of respondents on different demographic items as shown in tables. Therefore, table 4.2.1 shows gender distribution, with females comprising 56.4% (193) and males 43.6% (149), reflecting typical staff gender representation in major federal medical centers in Nigeria.

**Table 4.2.1** **Distribution of the Respondent by Gender**

|            | Frequency | Percent | Valid Percent | Cumulative Percent |
|------------|-----------|---------|---------------|--------------------|
| Valid Male | 149       | 43.6    | 43.6          | 43.6               |
| Female     | 193       | 56.4    | 56.4          | 100.0              |
| Total      | 342       | 100.0   | 100.0         |                    |

Source: Field Survey, 2024

Table 4.2.2 show age distribution: 13.2% (11) were below 20, 26.3% (90) were 20-30, 31.6% (108) were 31-40, 20.2% (69) were 41-50, 13.2% (45) were 51-60, and 5.6% (19) were above 60. Most respondents were young and economically active, well-positioned to understand and appreciate the relevance of project management systems in healthcare delivery.

**Table 4.2.2** **Distribution of the Respondent by Age**

|                     | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------------|-----------|---------|---------------|--------------------|
| Valid Below 20years | 11        | 3.2     | 3.2           | 3.2                |
| 20– 30 years        | 90        | 26.3    | 26.3          | 29.5               |
| 31– 40 Years        | 108       | 31.6    | 31.6          | 61.1               |
| 41– 50 Years        | 69        | 20.2    | 20.2          | 81.3               |
| 51 – 60 Years       | 45        | 13.2    | 13.2          | 94.4               |
| Above 60 Years      | 19        | 5.6     | 5.6           | 100.0              |
| Total               | 342       | 100.0   | 100.0         |                    |

Source: Field Survey. 2024

Table 4.2.3 depicts marital status distribution: 39.8% (136) were single, 53.5% (183) married, 2.9% (10) divorced, 2.0% (7) widowed, and 1.8% (6) in other categories. This diverse distribution provides valuable perspectives on project management systems' impact on healthcare delivery.

**Table 4.2.3** **Distribution of the Respondents by Marital Status**

|               | Frequency | Percent | Valid Percent | Cumulative Percent |
|---------------|-----------|---------|---------------|--------------------|
| Valid Single  | 136       | 39.8    | 39.8          | 39.8               |
| Married       | 183       | 53.5    | 53.5          | 93.3               |
| Divorced      | 10        | 2.9     | 2.9           | 96.2               |
| Widow/Widower | 7         | 2.0     | 2.0           | 98.2               |
| Others        | 6         | 1.8     | 1.8           | 100.0              |
| Total         | 342       | 100.0   | 100.0         |                    |

Source: Field Survey, 2024

The distribution of educational qualifications shows 3.8% (13) with secondary certificates, 25.4% (87) with National Diploma/NCE, 49.7% (170) with first degrees, 9.9% (34) with second degrees, 1.8% (6) with Ph.D., and 9.4% (32) with professional certifications. This indicates most respondents were well-educated and qualified to provide informed responses.

**Table 4.2.4 Distribution of the Respondents by Highest Level of Education Achieved**

|                          | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------------------|-----------|---------|---------------|--------------------|
| SSCE/equivalent          | 13        | 3.8     | 3.8           | 3.8                |
| RN                       | 87        | 25.4    | 25.4          | 29.2               |
| Cert./OND/NCE/equivalent | 170       | 49.7    | 49.7          | 78.9               |
| First Degree/equivalent  | 34        | 9.9     | 9.9           | 88.9               |
| Ph.D.                    | 6         | 1.8     | 1.8           | 90.6               |
| Professional /equivalent | 32        | 9.4     | 9.4           | 100.0              |
| Total                    | 342       | 100.0   | 100.0         |                    |

Source: Field Survey, 2024

The respondents' distribution by years in the organization shows 13.7% (47) with less than five years, 40.1% (137) between 5-9 years, 33.0% (113) between 10-14 years, 5.3% (18) between 15-19 years, 4.1% (14) between 20-24 years, and 3.8% (13) with 25+ years. This indicates substantial experience among respondents. Therefore, the demographic diversity across age, gender, marital, and social status provided heterogeneous perspectives on project management systems and their impact on healthcare delivery.

**Table 4.2.5 Distribution of the Respondents by Year Spent in the Organization**

|                    | Frequency | Percent | Valid Percent | Cumulative Percent |
|--------------------|-----------|---------|---------------|--------------------|
| Below 5 years      | 47        | 13.7    | 13.7          | 13.7               |
| 5-9 years          | 137       | 40.1    | 40.1          | 53.8               |
| 10 – 14 years      | 113       | 33.0    | 33.0          | 86.8               |
| 15 –19 years       | 18        | 5.3     | 5.3           | 92.1               |
| 20-24 years        | 14        | 4.1     | 4.1           | 96.2               |
| 25 years and above | 13        | 3.8     | 3.8           | 100.0              |
| Total              | 342       | 100.0   | 100.0         |                    |

Source: Field Survey, 2024

### Descriptive Statistics

The studys constructs, including structured project planning and scheduling (PrEng) and health providers' job engagement (PrPSc) were subjected to descriptive statistical measurements. The computed values include mean (M), standard deviation (SD), skewness, and kurtosis. These measurements assess the normality distribution and degree of asymmetry for each construct. The results are presented in Table 4.2.

**Table 4.2 Descriptive Statistics**

|                    | N         | Mean      | Std. Deviation | Skewness  |            | Kurtosis  |            |
|--------------------|-----------|-----------|----------------|-----------|------------|-----------|------------|
|                    | Statistic | Statistic | Statistic      | Statistic | Std. Error | Statistic | Std. Error |
| FedAlig            | 342       | 3.49      | 1.367          | -.523     | .132       | -.922     | .263       |
| OpeEff             | 342       | 4.46      | .756           | 1.660     | .132       | 1.908     | .263       |
| Valid N (listwise) | 342       |           |                |           |            |           |            |

Field Study, 2024

### Test of Hypothesis

The regression results examining the effect of structured project planning and scheduling (PrEng) on health providers' job engagement (PrPSc) is depicted in Table 4.3. Therefore, the regression model in Table 4.3 shows that structured project planning and scheduling (PrPSc) significantly predict healthcare providers' engagement (PrEng) in Federal Medical Centers in South-West Nigeria. The correlation coefficient ( $R = 0.870$ ) indicates a strong positive relationship between PrPSc as a project management system (PMS) dimension and PrEng. The coefficient of determination ( $R^2 = 0.757$ ) reveals that 75.7% of the variability in healthcare providers' engagement is explained by changes in structured project planning and scheduling.

The adjusted  $R^2$  value (0.756) further confirms that PrPSc contributes significantly to variations in PrEng, demonstrating a strong model fit for predictions.

The regression analysis shows a significant F-statistic ( $F = 1059.614$ ,  $p < 0.05$ ), confirming that structured project planning and scheduling have a substantial effect on healthcare providers' engagement at a 95% confidence level. When other variables are constant, healthcare providers' engagement would equal 0.481 and increase by 2.787 for every unit increase in PrPSc. The beta coefficient ( $\beta = 2.787$ ) and t-test value ( $t = 50.355$ ,  $p < 0.005$ ) underscore the positive and significant impact of PrPSc on PrEng.

These results highlight the critical role of structured project planning and scheduling in enhancing healthcare providers' engagement. The findings support the hypothesis that project planning and scheduling significantly affect healthcare providers' engagement in Federal Medical Centers in South-West Nigeria, with a 95% confidence level. This demonstrates the importance of integrating robust project management systems to improve workforce engagement and operational efficiency in healthcare settings.

**Table 4.3: Summary of results of linear regression analysis for the effect of structured project planning and scheduling on health providers' job engagement**

| Model:<br>PrEng<br>= $\beta_0 +$<br>$\beta_1 \text{PrPSc} + \epsilon$ | Effect of structured project planning and scheduling on health providers' job engagement |        |       |                   |       |           |     |          |                    |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------|-------|-------------------|-------|-----------|-----|----------|--------------------|
|                                                                       | B                                                                                        | t      | Sig.  | R                 | $R^2$ | Adj $R^2$ | df  | F        | Sig                |
| (Constant)                                                            | .481                                                                                     | 32.552 | <.001 | .870 <sup>a</sup> | .857  | .756      | 1   | 1059.614 | <.001 <sup>b</sup> |
| PrPSc                                                                 | 2.787                                                                                    | 50.355 | .000  |                   |       |           | 340 |          |                    |
| a. Dependent Variable: PrEng                                          |                                                                                          |        |       |                   |       |           |     |          |                    |

#### Researchers' Findings, 2024

##### Discussion of Findings

The findings confirm that structured project planning and scheduling (PrPSc) significantly and positively predict healthcare providers' engagement (PrEng) in Federal Medical Centers in South-West Nigeria. The beta coefficient ( $\beta = 2.787$ ), t-test value (50.355), and p-value ( $< 0.005$ ) at a 5% significance level provide strong statistical support for the hypothesis. This indicates that as the effectiveness of project planning and scheduling increases, healthcare providers' engagement also improves. This finding aligns with Kerzner's (2017) assertion that well-executed project planning fosters employee motivation and engagement by ensuring timely and budget-conscious project completion, enhancing employees' sense of accomplishment and connection to organizational goals.

In healthcare settings, where high pressure and complex demands prevail, effective project planning and scheduling play a pivotal role in boosting engagement. Burke and Clark (2018) emphasized that robust project management practices lead to better-organized workflows, reduced stress, and improved job satisfaction among healthcare workers. Engaged employees are more likely to deliver high-quality patient care, contributing to better outcomes (Sawyer-George & Friday, 2023).

This study's findings are consistent with previous research. Harrison and Lock (2017) demonstrated that effective planning and scheduling positively correlate with employee engagement across industries, including healthcare. Employees involved in well-structured projects tend to show higher commitment to their work and organization. The acceptance of the hypothesis has significant implications for healthcare management in Federal Medical Centers in South-West Nigeria. Healthcare administrators should prioritize the development and implementation of comprehensive project planning and scheduling frameworks as part of their project management systems. By doing so, they can enhance healthcare providers' engagement, which is essential for delivering high-quality patient care and improving institutional performance. Structured planning ensures better alignment of tasks with organizational objectives, ultimately benefiting both employees and patients.

#### 5. Conclusion and Recommendation

The analysis confirms that structured project planning and scheduling significantly enhance healthcare providers' job engagement. The study concludes that effective planning and scheduling, as key dimensions of project management systems, are crucial for fostering a motivated and committed workforce in healthcare settings.

The study recommends that administrators in Federal Medical Centers adopt comprehensive project planning and scheduling tools tailored to healthcare needs. These tools should clearly define roles, responsibilities, and timelines to boost engagement. Additionally, incorporating software solutions with real-time updates can accommodate the dynamic nature of healthcare operations, ensuring adaptability and efficiency.

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