

Original Research Article

Staff Perception on Outsourced Facilities Management Services in Dalhatu Araf Specialist Hospital Lafia

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ARTICLE INFO	ABSTRACT
Article History	The study aimed at investigating staff perception on outsourced facilities
Received: July 20, 2020	management services with a view to enhancing staff satisfaction with outsourced
Accepted: August 27, 2020	facilities management services and work motivation. Survey research was carried
Volume: 2	out through the use of a questionnaire instrument. A total of three hundred and
Issue: 2	fifty (350) questionnaires were administered to staff, out of which three hundred
	and four (304) were retrieved. The Stratified sampling technique was adopted for
KEYWORDS	the study, while data obtained from the field were analyzed using statistical
	packages for social sciences and smart PLS 3. The study found out 9 FM services
Staff, Management Services,	to be wholly outsourced in the hospital. These include; plant maintenance and
outsourced facilities, Nigeria	repairs, general cleaning services, waste disposal services, landscaping
	maintenance, security services, office furniture and stationery provision, catering
	car park maintenance and restroom management. In addition, the findings
	indicated that there was a strong positive correlation between staff satisfaction
	with outsourced FM services and work motivation as the r value = 0.392, which is
	significant at 0.01 level (2-tailed). Further findings revealed that service
	excellence has the strongest effect on work motivation and, on the other way,
	has a weak effect on satisfaction. The Study concluded that staff are quite
	satisfied with the outsourced FM services in comparison to those rendered by an
	in-house staff of the hospital. The study recommends that hospitals and
	companies alike should exploit the option of outsourcing not only for FM services
	but also other none core services to have a competitive advantage.

1. Introduction

Facilities management (FM) came up in the 1970s, and since then, it became one of the significant cost reduction strategies when outsourcing services became popular (Mohd-Noor & Pitt, 2009). Since then, FM was seen as one of the fastest-growing professions in the United Kingdom (UK). FM now represents a big service market in the UK, with service providers looking for the privilege to diversify somewhere internationally (Moore & Finch, 2004). According to the business services association (2014), FM has become a major business player that enable an organization to function at their most efficient and effective level, achieving collaboration and to add value to the organization's main business. This growth change of FM confirms findings by recent research by services futures (2017) in which the FM global market is expected to increase from \$952.2 billion in 2012 to \$1.314 trillion in 2018. however, organizations, industries, and companies perceptions of FM have drastically changed from mere cleaning and maintenance of a building to provide a service that makes a significant impact to the core business process by controlling all efforts that are related to the workplace as well as enhancing an organization's ability to thrive and succeed in a competitive world (Kulatunga, Liyanage & Amaratunga, 2010).

Outsourcing is a management model whereby in-house services previously performed in-house are contracted out to an external service provider to improve organizational efficiency and effectiveness (Ikediashi & Aigbavboa, 2018). the international association of outsourcing professionals (IAOP) posited that the global outsourcing industry is presently worth over \$1 trillion annually, and India has so far captured the largest share of the market (IAOP global outsourcing, 2011).

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Plunkett (2017), found out that the global outsourcing industry is estimated to have generated about \$524.4 billion in the year 2015, this figure increased to an approximately \$565.0 billion global industry in 2017, with emphasis on three broad areas: (1) logistics, sourcing and distribution services; (2) information technology (it) services and (3) business process outsourcing areas. Nonetheless, the world outsourcing survey by Deloitte (2016) confirmed that respondents from more than 25 different sectors of the global economy voted real estate and fm as the third most outsourced business function. This assertion has attracted lots of interests among researchers on the idea of bringing in external service providers to manage FM services, which will lead to improvement in cost transparency, strategic positioning, and increased access to new technologies, skills, expertise and ideas (li & choi, 2009).

the extent of use of outsourcing in hospitals has been widely investigated in several studies by numerous researchers i.e. in the united states of America (USA) (Lorence & Sink, 2004; Nicholson, 2004), in the united kingdom (UK) (Heavisides & Price, 2001; Riley, 2001), in New Zealand (Renner & Palmer, 1999), in Canada (Rivard-Royer Landry & Beaulieu 2002), and Greece (Moschuris & Kondylis, 2006). The general findings from these researches show that hospitals outsource a variety of services such as specialist services, logistics services and facilities management services.

Nowadays more and more firms are shifting their focus from service quality to service excellence in an attempt to improve service quality and customer satisfaction (Fisk, 2002). Despite the importance of service excellence, it has received less attention in the literature when compared to service Quality (Johnston, 2004). It is inferred that while service quality is the minimum condition essential to create staff satisfaction, service excellence which is at the other end, leads to customer delight.

Motivation on the other hand is about giving staff the right guidance, direction, resources and rewards so that they are inspired and keen to work in the way that you want them to. Staff members are one of the most valuable assets. Motivated staffs are more likely to stay and help build the organization.

In Dalhatu Araf Specialist Hospital (DASH) Lafia, Facilities Management has not been fully recognized; this study is aimed at revealing the opportunities available, Staff satisfaction and work motivation in the hospital, this being a relatively new concept without known prior research. This study intends to shed light on Facilities Management Services as practiced in Dalhatu Araf Specialist Hospital (DASH) Lafia.

Although outsourcing is one of the most extensively research areas, but its influence on FM services provision in hospital like Dalhatu Araf Specialist Hospital (DASH) Lafia is lacking. Furthermore other countries like UK, Singapore and even Nigeria have conducted few studies in this field but in relation to service quality, but none has explore the concept of service excellence in Hospital FM and its relationship with work motivation which entails a research Gap worthy of investigation. Therefore this study wishes to uncover the missing gap.

The aim of this study is to investigate staff perceptions on outsourced FM services with a view to improving FM service delivery in order to enhance staff satisfaction and work motivation in Dalhatu Araf Specialist Hospital Lafia

The objectives are;

- 1. To assess the Relationship between Staff satisfaction with outsourced FM service and work motivation in Dalhatu Araf Specialist Hospital Lafia.
- 2. To examine the effect of service excellence on Staff satisfaction with outsource FM services and work motivation in Dalhatu Araf Specialist Hospital Lafia.

2. Literature Review

FM was defined by then (1999), as a hybrid management discipline that combines people, property and process management expertise to provide vital services in support of the organization. Nutt (2000), sees FM as a resource management at strategic and operational levels of support. On the other hand, FM is a term that encompasses a variety of activities to effectively manage built assets and deliver services (Amaratunga, 2002). Amaratunga and Baldry (2002) affirms that FM is responsible for coordinating all efforts related to planning, designing and managing buildings and their systems, equipment and furniture to enhance the organization's ability to successfully compete in a rapidly changing world.

The International Facility Management Association (IFMA) defined facility managements as a profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology

(IFMA, 2008). FM is further define as a process that ensures that building and other technical systems support the operations of an organization, as well as an integrated approach to operating, maintaining, improving and adapting the building and infrastructure of an organization to create an environment that supports the primary objectives of that organization (Atkin& Brooks, 2000). The British Institute of Facilities Management (2000) defines FM as the integration of multi-disciplinary activities within the built environment and the management of their impact upon people and the workplace. On the other hand, Pitt and Tucker (2008) defined FM as the integration and alignment of the non-core services, including those relating to premises, required to operate and maintain a business to fully support the core objectives of the organization. Atkin and Brooks (2009) posited that FM involves a variety of services, including real estate management, financial management, change management, human resources management, health and safety and contract management, in addition to building maintenance, domestic services and utilities supplies.

Cotts, Roper and Payant (2010) asserted that there is detailed explanations of both the functions and sub-functions of FM. The main functions include management of the organization, facility planning, and forecasting, lease administration, space/workplace planning, allocation and management, architectural/engineering planning and design, operations, maintenance and repair and general administrative services, among others. According to Kulatunga, Liyanage and Amaratunga (2010), FM services can be divided into two categories: hard FM and soft FM.

Ι.	II. DESCRIPTION	III. Examples
IV. HARD FM	V. MANAGEMENT AND MAINTENANCE OF	VII. ESTATE AND PROPERTY, INDOOR AIR, STRUCTURE
	VI. PROPERTY AND OTHER PHYSICAL ASSETS	AND FABRIC, WATER SUPPLY, ELECTRICITY, TELECOMMUNICATION SYSTEMS
VIII. SOFT FM	IX. MANAGEMENT OF SUPPORT SERVICES	X. CATERING, CLEANING, WASTE MANAGEMENT, Security, laundry

Table 1: Classification of FM services

Source: Kulatunga et al. (2010)

Williams (2001) categorized FM services into three broad facets such as the facilities sponsorship facets (responsible for the provision, maintenance and allocation of resources for the accommodation, and services required to facilitate corporate objectives), The intelligence facet (denotes understanding and monitoring of the facilities management function with regard to core business requirements) and Facilities service management facets (responsible for the overall direction and co-ordination of all the services such as cleaning, distribution, etc.) Fielder (2003) observed that FM services include property management, space management, communication infrastructure, building maintenance, administration, and contract management including catering, cleaning and security.

The Centre of Facilities Management (CFM) divides FM services into seven categories as building operations and management, property management, infrastructure management, environmental management, management of support services (cleaning, catering, security, etc.), information technology, etc. Hinks et al (2003) have divided FM services into two categories; hard FM and soft FM. Hard FM relates to management and maintenance of property, while soft FM includes the management of support services. The built environment, including infrastructure facilities such as estate and property, indoor air, structure and fabric, water supply, electricity and telecommunication systems come under the first category (hard FM); and catering, cleaning, waste management, security, and laundry describes the latter (soft FM).

Chotipanich (2004) found out that FM services is made up of five main components. This includes; real estate and property management, maintenance and repairs, office services, space planning and management as well as employee supports and services. FM services can be divided into three main services namely premises services, office services and central services (Barrett, 1995). On the other hand Opaluwah (2005) alleges that facilities management services in Nigeria can be categorize as personnel, information services, premises and support services. he further posited that the Support services consists of mail services, fleet car, catering, reception, house- keeping, office administration, furniture, refuse disposal, reprographics, security, stationery, travel, vending, power supply, water supply, land maintenance and laundry. Aloafin (2003) identified 9 major facilities management services. Which include janitorial, mechanical and electrical, building systems, building structures and permanent interior elements, furniture and equipment, security, food services and office administrative point of view to include classical, tactical and operational facilities management.

Premises	Offices services	Central services	Central services	
Building maintenance	Mailing	Catering		
Decoration work	Stationary	Room booking		
Sub-contractor	Photocopying	Insurance		
Telecommunication	Vehicles	Archival		
Security	Printing			
Safety				

Table 2: Types of facilities management services

Source: Barrett (1995)

FM in hospital cannot be differentiated from FM in other organizations (NHS, 2003). Rees (1998) stated that a safe environment, clean surroundings and an appropriate diet or a hotel services (hotel services) are integral parts in the diagnosis, treatment and recovery of those who are ill. While FM in other organizations seeks to provide a support function, FM in hospital helps in the provision of a better environment for staff and patients. Therefore, FM is an important function in Hospital which helps in the provision of a well-designed, well maintained and a good quality environment in hospitals, in order to improve the overall healthcare quality (Richardson, 2001). From the National Healthcare Services Trust (NHS) (2002) point of view, the core business of any hospital is the delivery of patient care whilst the FM in which the non-clinical patient care (i.e. FM services) is provided, is an important part of the patients journey.

Lavy and Fernandez-Solis (2010) notes that the development of the FM services in the hospital will increase the effectiveness of medical and the whole of the hospital service delivery. Therefore FM services should have no defects to ensure the full operation of the hospital. In addition, Baldwin and Shaw (2005) stated that when it comes to patients choice of hospitals, technical health-related issues may affect the hospital's reputation, but patients tend to base their choice on subjective assessments of FM services, such as the hospital environment, ease of parking, facilities for visitors and perceived cleanliness. Hospital FM always integrates various non-core services under its umbrella and thus it is difficult to demarcate its boundary.

According to Barret and Baldry (2009), FM services in the Hospital includes; pottering, medical electronics and maintenance, operational estates, printing services, security, catering services, car parking, patient services (hairdressing, chaplaincy), reprographic services and receipt and distribution. Okoroh, Gombera, John and Wagstaff (2001), observed that soft FM services that are generally provided in hospitals as shown in Table 3.

Estate management support	Environmental management	Hotel support services	
Services	support services		
Grounds	Health and safety	Catering	
Gardening	Pollution control	Reception	
Energy	Fire precautions	Residences	
Utilities	Incineration	Housekeeping	
Property management	Waste management		
Property maintenance			
Design			
Building services			
Site support services	Business support services	Space management support	

Table 3: Classification of Hospital FM services

		Services
Portering	Leisure	Space utilization
Security	Recreation	Space allocation
Car parking	Strategic maintenance	Space audit
Telecom	Transportation	
Accommodations	Occupational health	
Cleaning	Reprographic	
Hygiene	Procurement	
	Information technology	
	Purchasing	
	Marketing	
	Complaints management	

Source: Okoroh(2001)

Although hospital FM service coverage is complex and varies from hospital to hospital, four common and vital services can be identified: catering, estates, domestic and portering (Sarshar, 2006). On the other hand, Cole (2004) identified FM services for hospitals to include; cleanliness, hospital food and a safe and comfortable environment. In the same vein, Miller and May (2006) suggested that the most vital FM factors to people were cleanliness, hospital food, comfortable environment and privacy and dignity.

Mochuris and Kondylis (2006) define outsourcing as the process of contracting an outside company to provide a service previously performed by internal staff. In many cases, outsourcing involves a transfer of management responsibility for delivery of service and internal staffing patterns to an outside organization. According to Prahalad and Hamel (1990), outsourcing involves restructuring a firm's activities in order to stimulate the development of its core activities by externalizing less important activities and those that are not a source of competitive advantage. Ikediashi (2014) defines outsourcing as the decision by an institution to contract out services to an external provider at an agreed fee for specified period of time. This definition purposely does not differentiate between types of services, provided they are within the confine of facilities management services. Subcontracting, contracting out, staff augmentation, flexible staffing, employee leasing, professional services, contract programming, consulting, and contract services are all terms which refer to outsourcing (Sarpin&Weideman, 1999).

In contrast, FM outsourcing could then be referred to as the development of a new contractual relationship where facilities management tasks formerly carried out by facilities management in-house team are transferred to one or more service providers, either pre-existing or specifically created for that purpose (Ikediashi, 2014).Miller (1994) in a paper on outsourcing trends in California categories outsourcing into four basic types, they includes general outsourcing, and transitional outsourcing, business process outsourcing and business benefit contracting. In terms of emerging sourcing arrangements, Bustinza, Molina, And Gutierrez (2005) identified six forms of outsourcing, they include value-added outsourcing, equity holdings, multi-sourcing, co-sourcing, spin-offs and creative contracting.Franceschini, Galetto, Pignatelli and Varetto (2003) identified three broad categories of outsourcing based on the level of partnership, they are traditional outsourcing, strategic outsourcing, and futuristic outsourcing.

In terms of information technology (it) outsourcing, paravastu (2007) posited that the various types of outsourcing includes; total outsourcing, selective outsourcing, total in-sourcing, time-sharing, body shop, project management, transitional outsourcing, smart contracting, offshore/global outsourcing, value-added outsourcing, application service providers, co-sourcing, spin-offs, facilities management outsourcing and system integration outsourcing. Furthermore, Gandhi, Gorod, and Sauser (2012) identified another two categories of outsourcing based on the common geographic forms, these are onshore outsourcing and offshore outsourcing.

Atkin and Brooks (2009) categorized outsourcing based on the contract terms and nature of activities. These are managing agent, managing contractor and total FM. managing agent is an external consultant or specialist who is capable of performing FM activities and act as a client representative (Dey, 2012). This person/organization is responsible for arranging nomination of service providers (Atkin& Brooks, 2009). Under this arrangement, contracts will be signed between the client organization and the service provider. Whereas, managing contractor is an external consultant who maintains a single point of contact with the organization. Subcontractors will have all the contractual relationships with the managing contractor. If the subcontractors' work falls below the expected level, the organization directly complains to the managing contractor (Atkin& Brooks, 2009). Total FM is a strategy in which all support services are outsourced to large FM companies (Dey. 2012). This strategy provides a complete and competitive solution as the FM company provides all the services and at as a single purchasing point.

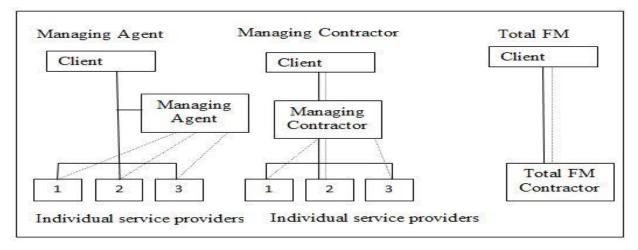


Figure 1: Types of outsourcing and their contractual links (Source: Atkin and Brooks, 2009)

Several studies have been conducted on the nature of FM services outsourced in hospitals. For example; Ikediashi and Ekanem (2015) carried out a study on Outsourcing of FM services in public hospitals in Nigeria. They found out six FM services that are frequently outsource in the hospital, these includes; Plant management and repairs, general cleaning services, waste Disposal and environmental management, landscape maintenance, security and catering/restroom management. He concluded that Cleaning, security and catering services received the highest satisfaction ratings, while plant maintenance services, however, received the least satisfaction rating.

Liu, Hotchkissand Bose(2007) posited that the FM services that are frequently outsource in hospitals includes single and multiple services, services with a clear level of need, services for the treatment and prevention of diseases and services with simple or complex technicalities. They further concluded that within these services, there are services which are more contractible or less contractible. Another study by Moore (1996) indicated that outsourcing in US hospitals had changed from traditional or old practices such as food preparations, laundry and housekeeping into new areas such as emergency care, substance abuse, skilled nursing and equipment maintenance.

On the other hand, The Toronto Hospital in Canada have started outsourcing a wide range of services such as nutrition services, housekeeping, plant operations and maintenance, transportation of goods and patients, materials management and logistics and laboratory services which was previously performed in-house (Stonehouse, Hudson&O'Keefe 1996). Moschuris and Kondylis (2006) researched on frequently most outsourced FM services in Greek public hospitals. They found out nine most frequently outsourced FM services in Greek public hospital to includes cleaning, security, cafeteria, legal services, clinical/diagnostic equipment maintenance, information services, laundry, laboratory services and food.

3. Research Methodology

The study adopted the quantitative method aimed at achieving the overall strength of the study. Quantitative method was used to identify, assess, and analyze the outcome of the questionnaire survey which includes Staff perception towards outsourced FM service excellence in the hospital. The target respondents of this study is all staff (technical and administrative

staff) in the hospital as at the time of the survey. the various staff contained in various departments in Dalhatu Araf specialist hospital Lafia which formed the study populations includes; doctors (senior consultants, registrars, residents, interns, and students doctors), nurses (specialist nurses, nurse unit managers, associate nurses, enrolled nurse and registered nurses), vendor staff admin (payroll staff, quality assurance staff, receptionist staff, and maintenance staff), vendor staff technical (clinical assistants, porters, ward clerks, patients service assistants, matrons, laundry staff and securities) pharmacists, lab scientist, physiologists, radiologists and the general administrative staff. To determine the sample size for this research, Bartlett *et al* (2001) table of determining sample size (2001) was used. The table indicates that for population size of eight hundred and two (802), sample size of about Two hundred and three (203) can be used as the minimum. The study adopted the stratified random sampling technique in selecting sample, So that each element or member of the population will have equal chance or probability of being selected. The choice of the sampling technique was based on the nature of the population of the study. It is the view of the researcher that only staff who are among the major users of FM services in the hospital are required for the survey rather than patients and all other all users of FM services in the hospital considering the research topic.

The Questionnaire for this study was designed based on the research objectives. The questionnaire was designed for staff in the hospitals aimed at soliciting response about their perceptions towards Outsource FM services in the Hospital as well as their satisfaction level. The questionnaire was divide into five (5) section. Section A comprises of questions on the demographic information about the respondents (Staff), section B encompasses questions about FM services outsourced in the hospital aimed at soliciting information about FM services Being outsourced, performed by in-house team and those not applicable in the hospital. Section C on the other hand contained questions on the satisfaction level of staff with outsourced FM services in the surveyed hospital. Section D has questions on work motivation while section E contained questions on FM service excellence aimed at retrieving responses on the overall condition of FM services in the Hospital.

The study adopted the use of internal consistency reliability test. Internal consistency can be measured in a number of ways the most commonly used statistic is Cronbach's coefficient alpha. The statistic provides an indication of the average correlation among all of the items that make up the scale Nunnally (1975) in Pallant (2011) recommends a minimum level of .7 cronbach alpha values. The Results indicated that a reliable Cronbach's alpha of more than 0.7 was achieved in all of the constructs (Table 4). As the cronbach's alpha are at the lowest point of acceptance based on Pallant (2011), the questionnaire was improved for the field survey

XI. S/N	XII. CONSTRUCTS	XIII. Cronbach's Alpha	XIV. CRONBACH'SALPHABASED STANDARDIZED ITEMS	XV. ITEMS
XVI. 1	XVII. Service excellence	XVIII717	XIX717	XX. 10
XXI. 2	XXII. SATISFACTION	XXIII749	XXIV747	XXV. 10
XXVI. 3	XXVII. WORK MOTIVATION	XXVIII754	XXIX746	XXX. 8

Table 4 Reliability of pilot study

The questionnaire validation was carried out before administration of the pilot survey. The proposed questionnaires were printed and given to four (4) lecturers in the department of estate management and valuation, faculty of Environmental Technology, Abubakar Tafawa Balewa University Bauchi for proof reading and validation. All the observations such as scale of measurements, avoidance of grammatical jargons and major corrections regards to measuring each constructs were effected before the questionnaire was administered in the pilot and field study. Statistical Package for Social Science (SPSS, version 22) was used for statistical analysis of the data generated from the questionnaire survey. The data obtained using questionnaire survey was thoroughly screened, analyzed and sorted out for analysis depicting the responses from the respondent, as the study contained association and inferential research questions, parametric measurements (bivariate correlation and Structural Equation Modelling, PLS-SEM).

4. Results

Demographic information of the respondents: The demographic information of the respondents were analyzed in table 9. The frequency and percentage analysis was carried out and the results were presented to explore the respondents' profile.

/ariables	Option	Frequency	Percentage
ge	Less than 30years	62	21.2
	Between 31 to 40	167	57.2
	Between 41 years and above	63	21.6
Gender	Male	197	67.5
	Female	95	32.5
Qualification	O' level	40	13.7
	NCE/Diploma	29	9.9
	HND	37	12.7
	Degree	125	42.8
	MBBS	42	14.4
	Master's Degree	17	5.8
	PhD	2	7
Norking Experience	Less than 5 years	44	15.1
	6 to 10 years	102	34.9
	11 to 20 years	101	34.6
	21 years and above	45	15.4
Which category of staff do you belong?	Doctor	43	14.7
	Nurse	61	20.9
	Pharmacist	32	11.0
	Lab scientist	27	9.2
	Physiologist	22	7.5
	Radiologist	19	6.5
	Administration	44	15.1
	Vendor staff (technical)	27	9.2
	Vendor staff (administration)	17	5.8

Table 5: Demographic Information of the respondents

Table 5 shows the profile of respondents for the study. There was a reasonable spread of responses across the major staff in the hospital. The result also indicate diverse set of academic backgrounds among usable responses received as almost 43% had bachelor's degree while 5.8% had master's degree.

Relationship between staff satisfaction with outsourced fm services and work motivation: A correlation analysis was carried out to assess the relationship between Staff satisfaction with outsourced FM services and Work motivation in the study area. The results presented in the Table 6.

		Satisfaction	Motivation
Satisfaction	Pearson Correlation	1	.392
	Sig. (2-tailed)		.000
	Ν	292	292
Motivation	Pearson Correlation	.392	1
	Sig. (2-tailed)	.000	
	Ν	292	292

Table 6 shows the relationship between staff Satisfaction with outsourced FM services and Work motivation in Dalhatu Araf Specialist Hospital Lafia was investigated using Pearson product-moment correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was a strong, Positive correlation between the two variables, r = 0.392, n = 292. And correlation is significant at 0.01 level (2-tailed). This means that as the satisfaction level of staff in the study area increases, so does their level of motivation.

Effect of service excellence on staff satisfaction with outsourced FM service and work motivation: In order to determine the effect to which service excellence has on staff satisfaction with outsourced FM services in Dalhatu Araf Specialist Hospital Lafia (DASH), the fourth objective of this research work, Partial Least Squares-Structural Equation Modelling (PLS-SEM) was used. Chin (2002), Wong (2013) and Hair, Hult, Ringle and Sarstedt (2014) recommended the assessment of exploratory factor analysis (EFA), convergent validity and discriminant validity of the outer (measurement) model before the assessment of the inner (structural) model which were presented in paragraphs below.

Convergent validity and reliability: The convergent validity of the outer (measurement) models was assessed using the factor loadings, t-statistics, Average Variance Extracted (AVE) and composite reliability. Convergent validity was achieved whenever the factor loadings are high and statistically significant. A t-statistic value above 1.96 indicate significant outer loading (Wong, 2013). Average Variance Extracted (AVE) is recommended to be above 0.5 while composite reliability is recommended to be above 0.6 (Hair et al., 2014). The use of Average Variance Extracted (AVE) to measure the convergent validity ensures that each measurement model is measuring what is supposed to measure.

Table 7: Validity and Reliability Result

Latent Variables	Indicators	Factor Loadings	Cronbach's Apha	Composite Reliability	AVE
Service Excellence	SE1	0.655	0.757	0.818	0.501
	SE2	0.662			
	SE3	0.630			
	SE4	0.679			
	SE5	0.612			
	SE7	0.634			

Satisfaction	S3	0.568	0.787	0.841	0.500
	S4	0.534			
	S5	0.631			
	S6	0.645			
	S7	0.633			
	S8	0.644			
	S9	0.643			
	S10	0.738			
Motivation	M1	0.583	0.735	0.811	0.517
	M2	0.564			
	M3	0.523			
	M4	0.801			
	M5	0.487			
	M7	0.818			
	M8	0.571			

Tables 7 present results of the outer model of the effects of service Excellence on Staff satisfaction with outsourced FM services and work motivation in the study area. The table presents the factor loadings cronbach's Alpha, Average Variance Extracted (AVE), the R² Value and the composite reliability. The entire items factor loadings, ranging from 0.487 to 0.818, were significant at 0.001 levels. The Average Variance Extracted (AVE) was 0.501 for service excellence, 0.500 for satisfaction and 0.517 for motivation respectively which is above the recommended 0.5 threshold. The composite reliability C.R value was 0.818 for service excellence, 0.841 for satisfaction and 0.811 for motivation which is above the recommended 0.6, signifying high internal consistency of the outer (measurement) model. However, in line with Hair *et al.* (2014) recommendation for deleting indicators with poor outer weight to improve AVE, zero Therefore, the convergent validity and reliability were confirmed.

Discriminant validity:The discriminant validity was assessed using the constructs' correlation and the constructs' cross loadings. Awang (2014) recommended that for a measurement models to achieve discriminant validity, its correlation with other constructs should not be greater than 0.85. On the other hand, Fornell and Larcker (1981) established that the discriminant validity of a construct is achieved when "square root" of Average Variance Extracted (AVE) of each of the research construct is greater than the correlation among the other research constructs. The cross-loading among the constructs was assessed to ensure that none of the construct is loading more in another construct on than itself (Hair et al., 2014). Table 8 shows the correlation among constructs.

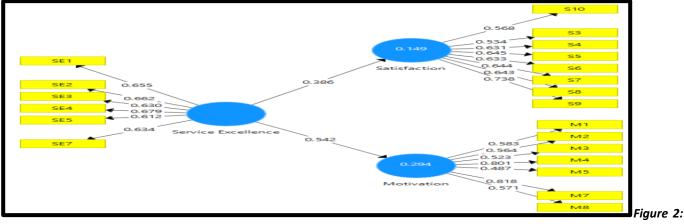
	Service excellence	Satisfaction	Motivation
Service Excellence	0.7078	0.348	0.542
Satisfaction	0.348	0.7071	0.386
Motivation	0.542	0.386	0.7190

Table 8: Discriminant Validity

The square root of the Average Variance Extracted (AVE) was boldly inserted into the table in diagonal. The result shows that the highest correlation matrix was between Service Excellence and work motivation yielding 0.542. An assessment of the square rooted AVE shows that the square root of each construct is greater than its correlation among other constructs.

It further shows that none of the research constructs is cross-loading more on another construct than itself. Therefore, the discriminant validity, through constructs correlations and cross-loadings, was confirmed. Therefore, the models were suitable for Partial least squares (PLS) regression analysis.

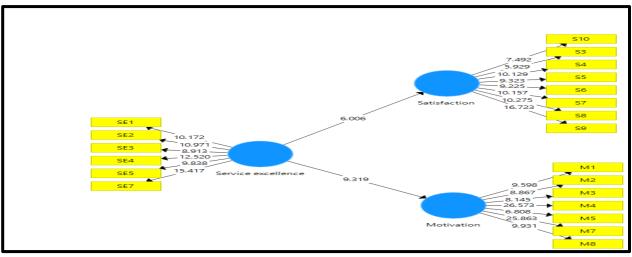
Assessment of the Structural Model: The effect of service Excellence on staff satisfaction and work motivation in the study area was assessed using PLS interface. The models shows in Figure 2.



Effect of Service Excellence on staff satisfaction with outsourced FM services and work motivation

The coeffecient of determination, R^2 , is 0.149 for the Satisfaction endegenous Latent Variable and 0.294 for work motivation. This means that Service excellence moderately explain just 14.9% Variance in Satisfaction and 29.4% Variance in work motivation.

Inner Model Path Coeffecient Sizes And Significance: The inner model suggest that service excellence Has the strongest effect on work motivation (0.542) and on the other way has weak effect on satisfaction (0.386). moreover the hypothesised path relationship between service excellence and staff satisfaction is statistically significant (0.386) and other hand the hypothesised statistical relationship between service excellence and work movitation is also statistically significant (0.542). thus it can be concluded that service excellence moderately predicts staff satisfaction and work motivation. On the other hand, service excellence affect staff satisfaction with Fm services in the study area as well work motivation.



1) Assessment of the Structural Path Significance in Bootstrapping

Figure 3: T-statistic of structural Model (Direct Effect)

Figure 3 show the t-statistics of each construct and indicator respectively. The result shows the effect of service excellence on staff satisfaction with outsourced FM services and on work motivation in the study area. This is statistically significant as indicated by t-statistics of 6.006 and 9.319 respectively which is above 1.96 thresholds. The effect of service excellence on staff satisfaction with outsourced FM services is significant as the result indicated a t-statistics of 6.006 which is above 1.96 thresholds. On the other hand, the effect of service excellence on work motivation is also statistically significant as it indicate a T- statistics of 9.319 Satisfaction which is also above the 1.96 threshold.

2) T-Statistics of Path Coefficient (inner model): Table 9 shows results of T- statistics on the prevailing effects of service excellence on staff satisfaction with outsourced FM services in the study area and work motivation respectively

Table 9: T. statistics of path coefficient

	T-Statistics
Service Excellence > Satisfaction	9.319
Service Excellence > Motivation	6.006

Table 9 shows that all the T-statistics are larger than 1.96, so we can say that the outer model Loadings are highly significant.

3) T-Statistics of outer Loadings: The t. statistics of each of the outer loadings in the structural equation modeling is presented in table 10.

Table 10-: T statistics of outer loadings

	T-Statistics	
M1 < Motivation	9.598	
M2 < Motivation	8.867	
M3 < Motivation	8.145	
M4 < Motivation	26.573	
M5 < Motivation	6.808	
M7 < Motivation	25.863	
M8 < Motivation	9.931	
S10 < Satisfaction	7.492	
S3 < Satisfaction	5.929	
S4 < Satisfaction	10.129	
S5 < Satisfaction	9.323	
S6 < Satisfaction	9.225	
S7 < Satisfaction	10.157	
S8 < Satisfaction	10.275	
S9 < Satisfaction	16.723	
SE1 < Service Excellence	10.172	
SE2 < Service Excellence	10.971	
SE3 < Service Excellence	8.913	
SE4 < Service Excellence	12.520	
SE5 < Service Excellence	9.838	
SE7 < Service Excellence	15.417	

5. Discussion

The relationship between staff Satisfaction with outsourced FM services and Work motivation in Dalhatu Araf Specialist Hospital Lafia was investigated using Pearson product-moment correlation coefficient. The results indicated that, there was a strong, Positive correlation between the two staff satisfaction with outsourced FM services and work motivation in the study area. This means that as the satisfaction level of staff in the study area increases, so does their level of motivation. This findings is in line with the findings of such as Olluseyi and Ayo (2009), which posited that satisfaction with the work environment (FM services) can enhance motivation which often lead to high productivity at work.

Effect of service Excellence on staff satisfaction with outsourced FM services and Work motivation in the study Area: In order to determine the effect to which service excellence has on staff satisfaction with outsourced FM services in Dalhatu Araf Specialist Hospital Lafia (DASH), Partial Least Squares-Structural Equation Modelling (PLS-SEM) was used. Findings confirm the existence of strong effect of service excellence of outsourced FM services on overall satisfaction of staffs and work

motivation. This is consistent with findings from previous studies such as Otani and Kurz (2004), and Rohini and Mahadevappa (2006). This finding however makes important contribution to service excellence literature which is unique from previous studies. For instance, while previous studies such as Ikeiashi et al (2015), focused on impact of service quality on user's satisfaction, this study captured the effects of service excellence on staff satisfaction with outsourced FM services and on work motivation.

The findings also shows that outsourced cleaning, Facility Refurbishment and plant maintenance, waste management and security services are the top three rated services in terms of quality of service delivery. It means that the decision to outsource these services has been well received by staffs as they are reasonably satisfied with the services rendered by vendors. However, plant maintenance services (PMS) and waste and environmental services (WES) did not possess strong relationship with overall satisfaction. This findings also confirm the findings of Ikeiashi*et al* (2015).

6. Conclusion

This study assessed the level of staff perception with outsourced FM services using data generated from Dalhatu Araf Specialist Hospital Lafia,Nasarawa state Nigeria. Findings reveal that all the service excellence attributes of outsourced FM services received high mean values indicating that users are satisfied with FM services currently outsourced in the hospital. Specifically, satisfaction Facility Refurbishment, plant maintenance and repairs, and general cleaning services received very high satisfaction ratings from respondents. The High rated FM services are cleaning, Facility Refurbishment and plant maintenance, and waste management and security services while the least rated service is the restroom management and landscaping maintenance. The findings also suggest that staff are quite satisfied with the outsourced FM services rendered by the external FM services providers in comparison to those rendered by in-house staff of the hospital. Therefore it is recommended that FM department in the Hospital should ensure quality in the provision of FM services influence work motivation and in turn productivity at work place can also increase. Also The FM department in the Hospital needs to establish effective information gathering and management practices to achieve service excellence, such as the provision of a more comprehensive feedback form and a guideline to the staff members.And lastly the Hospital should include the keep performance index (KPI) to measure the Performance of the FM department so as to achieve excellent FM services delivery.

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