

Physical Evidence and Customer Patronage in Health Care Services in Uyo

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Abstract: *The recent growth of competition and the wide spread in technological awareness have made customers to sort out for ways to evaluate service quality before making purchase decision. One of the measures employed by customers in this regards is the firm's physical environment. The framework of physical evidence has become paramount in service marketing due to the fact that pre-purchase assessment of service is difficult to ascertained and customers are becoming more skeptical about the overall service experience since services are intangible. In this regard, this study was carried out in order to assess the effect of physical evidence on customer patronage of health care service in Uyo, Akwa Ibom State. The determinant factors of physical evidence that customers considers when making repeat purchase of a health care facility were used as pre-determined factors in measuring customer patronage. These pre-determined factors formed the independent variables for the study which were architectural design, ambient conditions and Cooperate identity while the dependent variable was Customer patronage. The population was the customers of five selected public health care facilities in Uyo metropolis and its environs. Using Top-man formula, a sample size of 358 employees was considered for the study and data collected within the period of two weeks. A survey research design was adopted for the study. Research questions were answered using frequency, mean and standard deviation. The hypotheses stated were tested using simple linear regression model at a 5% level of significance. From the data analysis, the major findings revealed that Architectural Design had a significant effect on customer patronage of health care services in Uyo, (t -statistic = 43.312 > p -value (0.000)). The study revealed that Ambient Conditions had a significant effect on customer patronage of health care services in Uyo, (t -statistic = 48.491 > p -value (0.000)). The study also revealed that Cooperate Identity had a significant effect on customer patronage of health care services in Uyo, (t -statistic = 42.292 > p -value (0.000)). From the findings, it was concluded that the physical evidence of a health care has a significant effect on the customer patronage and that customers will frequently revisit a health facility if the environment meets their expectations. In line with this, it was recommended that service industries should aim at influencing their customer's patronage by making their environment and surroundings an important component of service marketing strategy as customers will always make their judgment based on what they can see and induce inferences from it.*

Keywords: Physical Evidence, Customer Patronage, Ambient Conditions, Architectural Designs and Corporate Identity.

INTRODUCTION

The health care industry represents firms that provide medical services, medical insurance, manufacture medical equipment and drugs, or otherwise facilitate the provision of healthcare to patients. The firms in the health care industry depend on consumers who seek medical attention for an illness. The health care industry means individuals and organizations involved in the development, manufacture, supply or deliver health products. The health care industry provides goods and services to treat patients with curative, preventive, rehabilitative, and palliative care in spectacular, fantastically organized environments; with serene landscaping, sensational architecture, enveloping ambience and well oriented staff. The health care industry operates within an environment and this environment has a way of influencing the customer's patronage in the health sector. Physical environment in the health care industry is a crucial element in maintaining competitive edge in this industry. The physical environment in the health care services plays a significant role in shaping expectations, distinguishing service companies, facilitating customer and employee goals, and affecting the nature of customers' experiences and satisfactions in the health care industry.

Physical environment represents the surroundings in which service is offered and where the company and customers interact combined with tangible commodities that facilitate performance or communication of the service. In service marketing, this surrounding is refers to as the Physical Evidence and it is one of the 7Ps of the marketing mix element in services marketing. Zeithaml and Bitner (2003) opined that physical evidence is the environment in which the service is delivered, where the firm and customer interact with any tangible component that facilitates performance of the service. According to Asiegbu *et al*; (2012), physical evidence includes the appearance of physical structure, landscaping, interior furnishing, equipment, uniforms, signs, printed materials and other visible cues that provide indication of service quality. Amue *et al*; (2013) asserted that physical evidence is an element of services marketing mix which enables the consumer to evaluate a firm. It also includes aspects of atmosphere, such as temperature, lighting, colour, music and scent. Physical evidence is more profound in firms that offer core services, like hotels, hospitals, cinemas and schools. It is one of the marketing mix elements in the service industry.

Services include all economic activities whose output are not a physical product or construction, but is generally consumed at the same time it is produced; and provides added value in forms such as (convenience, amusement, timeliness, comfort, safety,

health) that are essentially intangible concerns of its first purchaser. According to Lancaster and Massingham (2001), service is an intangible product involving a performance, deed or an effort that cannot be tangibly possessed. Lovelock and Wirtz (2007) wrote that services are economic activities offered by one party to another, most commonly employing, time-based performance to bring about result in recipients themselves or in objects or other assets for which procurements have responsibility. In the past years, services have gone to the heart of value creation within the economy as consumers are concerned with the performance of service rendered to them. The service performance of a particular health care facility determines continuous customer patronage. The effectiveness and efficiency of the service offering depend on the quality of the service setting. The physical evidence framework identifies the importance of physical surroundings on employees as well as clients. The framework further illustrates that the environment is made up of a combination of environmental dimensions including temperature, music (Ambient Conditions), Spatial Layout, Staff Attitude, layout and furnishing (Physical architecture) and Signs (Corporate Branding).

Firms that desire sustained patronage in today's highly competitive business environment are required to have the satisfaction of their customers at heart. Customer patronage is the level to which buying units concentrate purchases over time to a given brand based on good reinforcement and expressed through repetitive purchasing behaviour (Nyakweba *et al*; 2015). Customer patronage is also concern with the processes that customers engage in when choosing a brand among alternatives; as well as the factors and attributes used in the selection process. Behaviourial scientists thus propose that customer patronage results from a trial that gets reinforced through satisfaction, and leads to repeat purchase; while cognitive psychologists contends that customer patronage builds through mental processes, based on the believe that consumers engage in extensive problem solving behaviour involving services (Nyakweba *et al.*, 2015). Customer patronage important is essential to business sustainability in the health care industry. Hence, marketers strive to define customers' preference with a view to produce value that elicits customer patronage (Njite *et al*; 2015).

The framework of physical evidence is paramount in service marketing due to the fact that pre-purchase assessment of service is difficult to measure due the peculiar nature of service- intangibility, heterogeneity, perishability and inseparability. This peculiar nature of services poses challenges for the health care providers in their effort to establish and maintain relationship with customers; as customers' evaluation of service is totally dependent on personal perception of the service encounter. Because of this peculiar nature of service, customers generally look for cues from physical evidence to evaluate service quality. Thus, it becomes important for service health care industries to manipulate the physical evidence effectively to enhance customers' patronage and increase their business growth. Physical evidences aims at producing conducive and relaxed environment leading to customer's patronage in the health care industries and all the attributes of physical evidences if adopted by health care providers can help meet customers' patronage, demands and satisfaction. Based on this, the researcher deemed it necessary to carry out this research to determine how physical evidence affects customer's patronage of Health Care Services in Uyo, Akwa Ibom State.

Statement of the Problem

Customers are skeptical about overall service experience because services are intangible: they cannot be seen, tasted, felt, heard or smelled prior to purchase. Other characteristics of service that pose challenge to marketers are: heterogeneity - the quality of service depends on who provides them and when, where, and how; inseparability - services cannot be disconnected from their providers; perishability – services cannot be stored for later sale or use. As a result of these, customers find it difficult to evaluate service quality and make purchase decision. Customers however choose to rely on several measures of service quality to make purchase decision. Such measures include the firm's physical environment. Consumers cannot experience the service before making a purchase decision; they make purchase decision based on preliminary evaluation of tangible elements associated with the service. That is to say, there must be certain clues that will help them make superficial assessment before obtaining the service. Thus, consumers make inference about the service quality from things they can see in connection with the service such as the place, people, price, equipment and communication (Kotler and Armstrong, 2013); and make purchase decision accordingly. In other words, to allay the uncertainty in the service experience, consumers look for signals of service quality, prior to purchase to derive inferences.

Many health care industries lack knowledge of how customers enjoy their facilities and the manner in which specific colour, spatial layouts, signs, symbols, architectural designs and other physical environment components contribute towards creating distinctive services and memorable experiences for patients. Most health industries do not see the need to invite professionals before constructing some structures in their establishments, thereby missing out important physical structures that could facilitate service quality as well as improve the physical environment of the health care. Sometimes the facilities are put in place but they are wrongly located, unpleasant service environment, lackadaisical behaviour of service personnel, inefficient packing space, poor building design, poor color presentation, lack of signage and other printed materials serving like service directories, inefficient landscaping, and lack of service equipment, high level of noise within and around. Most health care providers are just interested in starting up the health care industry without taking into consideration those structures that will make the physical environment attractive.

When these industries (health care) lack expected physical facilities and equipment required by employees for effective service quality delivery, it encourages reduction in employee morale to work, frustration at work place, and feeling of indifference towards organizational goals, which leads to lack of job satisfaction. This consequently leads to low productivity and loss of

competitive advantage. Such mistakes could also lead to high operating cost and less customers' satisfaction and patronage. No patient would want to visit a place the second time where he will not get the envisaged service experience (customer satisfaction). With these and more, it therefore becomes pertinent for the health care providers to provide symbolic evidence about the quality of their services to enable consumers create a mental picture of the service experience or the ability of the service provider. It was against this backdrop that the researcher decided to carry this study in order to examine the effect of physical evidence on customer patronage in health care service in Uyo, Akwa Ibom State.

Objectives of the Study

The main objective of this study was to determine the effect of physical evidence on customer patronage in health care services in Uyo. Specifically the study seeks to:

- i. Determine the effect of Ambient Conditions on customer patronage of health care services in Uyo.
- ii. Examine the effect of Architectural Design on customer patronage of health care services in Uyo.
- iii. Determine the effect of Corporate Identity on customer patronage of health care services in Uyo.

Research Questions

The following research questions were formulated from the objectives of the study as stated below:

- i. Do Ambient Conditions have any effect on customer patronage of health care services in Uyo?
- ii. Do Architectural Designs have any influence on customer patronage of health care services in Uyo?
- iii. In what way does Corporate Identity affect customer patronage of health care services in Uyo?

Hypotheses of the study

The following hypotheses were formulated for the study.

- HO₁: Ambient Conditions have no significant effect on customer patronage of health care services in Uyo?
HO₂: Architectural Designs have no significant effect on customer patronage of health care services in Uyo?
HO₃: Corporate Identity has no significant effect on customer patronage of health care services in Uyo?

LITERATURE REVIEW

The Concept of Physical evidence

Physical evidence also known as "servicescape" refers to the physical environment of a firm, including the overall layout, design and decoration. It is the built environment, with an artificial physical surrounding as opposed to the nature or social environment. Physical evidence involves the environment in which service is provided, together with all the tangible machineries that facilitate service performance (Zeithaml and Bitner, 2003). It consist of the physical environment in which the service is delivered, the elements that facilitate the service delivery, the organization of these elements and other physical components that underpin the service experience and enable customers to evaluate the quality of service. The physical environment is carefully organized by service organizations to facilitate the way in which service is delivered to customers. The elements of physical evidence help to influence consumers in the way they perceive the performance of service encounter and also affect the perception of an experience independent of the actual outcome. Physical evidence covers all the objective physical factors that can be controlled by the firm to enhance (or constrain) the actions of employee and customer. These includes controllable physical factors such as signage, furnishing, layout, colour, cleanliness, smell, music and many more others can be systematically manipulated to produce desired effects in the form of favourable disposition towards the service environment and the organization providing the service. According to Kotler (2013), there is no composition of physical evidence that is ideal across industries and since the taste of customers in each market varies, the elements of the physical environment can be based on;

- (a) The target audience;
- (b) What that target audience is looking for from the buying experience;
- (c) The physical environment variables that can fortify emotional reactions sought by the buyers; and
- (d) The ability of the physical environment to compete with the physical environment of competitors.

The elements in the physical environment constitute a crucial part of the service encounter and delivery process; since variables associated with the service serve as clues for the imperceptible service (Sweeney and Wyber, 2002; Hoffman and Turley, 2002). Stedman (2003) and Ryu and Han (2010) opined that the colourful setting of a physical environment determines customers' overall satisfaction and loyalty. Furthermore, Wilson *et al*; (2008) assert that physical environment is vital to the delivery of service, and has the capacity to close the gap between customers' expectation and actual service delivery. Recognizing the multidimensionality of the physical environment, Zeithaml and Bitner (2003) decomposed it into: ambient conditions; spatial layout and functionality; and symbols, signs and artifacts. Similarly, Harris *et al*; (2002) identify three dimensions of the physical environment: architectural design; interior design; and ambient conditions. Architectural design includes the building itself, spatial layout and functionality, size of the room, and window placement. Interior design includes furnishings, colours and artwork. Ambient

conditions comprise lighting, noise levels, odour and temperature. Signs involve the directions or signage and the décor used to communicate. Other dimension of physical evidence includes spatial layout and staff attitude. Spatial layout is the design and arrangement of services equipment, including the provision of space among them for easy movement (Wakefield and Blodgett, 2005). The comfortability of a customer in a service point depends much on the spatial layout of the physical surrounding (Awasthi and Suwivastava, 2014). A given object in the environment upon which one predisposes his attitude may include television or radio programme, person, product, profession, firm or a retail store. The success of the interactions among customers and employees depends on the staff attitude, which Little and Dean (2006) defined as employees' commitment towards the goals and aspirations of an organization, including their willingness to maintain membership of the organization. Thus, positive staff attitude, expressed vocally and non-verbally during customer-employee interactions, is a vital factor in creating lasting impression that influences satisfaction, repeat purchase and profitability (Brown and Lam, 2008).

Variables of Physical Evidence

Architectural Design: Architectural design refers to the building itself, spatial layout and functionality, size of the room, and window placement. Architectural designs are of different types. Design factors can either be functional or aesthetic. Functional design includes the building itself, spatial layout and functionality, size of the room, window placement, furnishings. In the view of Azila-Gbetteor *et al.*; (2013) it includes layout, signs and comfort. Wakefield and Blodgett (2005) suggests that care should be taken in the design of these functional elements so they can facilitate customers' exploration and stimulation within the service environment. Aesthetic factors denote the physical features which customers view to evaluate their artistic quality. The artistic elements are the extras that contribute to a customer's sense of pleasure in experiencing a service. The aesthetic features are colour, architecture, materials, style and décor (Azila-Gbetteor *et al.*, 2013). Although aesthetic and functional factors are narrowly related, the difference between them is observed by Aubert- Gamet (2007) who stated that aesthetic factors promote sensory pleasure in the service experience while functional factors help the behaviour of customers. It is easier for customers to evaluate these design factors because they are more perceptible than ambient conditions and so have a greater propensity to influence customers' perception of the service. Furthermore, spatial layout, decor and artifacts greatly contribute to the attractiveness of the physical environment (Wakefield and Blodgett, 2005). The arrangement of the spatial layout is to provide for ease of movement, and functionality is also paramount. A customer's evaluations of the attractiveness as well as the overall aesthetic impression are influenced by various aspects of interior elements and artifacts. In the health care industry, the architectural designs to look at for includes; hospital beds, proper patients beds, lighting, hand washing and disinfectant stations, health care equipment, proper ventilations, floor coverings; and quality instruments and furniture. All these can play significant role in delivering an image and in creating an overall aesthetic impression and can serve as important clues by which customers will evaluate the overall service experience.

Ambient Condition: The ambience comprise temperature, smell, and music or sound originating from the place where the service is delivered which consciously or subconsciously help the customer to experience the service. The ambient condition is not the same across industries or even firms in the same industry: it can be diverse. The ambience of a health spa is relaxing and calm, and the music and smell emanating from it underpin the service experience. The ambience of a nightclub on the other hand will be loud noise, loud music and bright lights which obviously in a different way will enhance the customer experience. The ambience for the health care will be cool, friendliness, responsiveness, reliability and empathy. According to Azila-Gbetteor *et al.* (2013) opined that customer's awareness of ambient factors is low because they usually exist on an unconscious level. However, Mattila and Wirtz (2001) argue ambient factors can influence a customer's evaluation of the service experience and this can make the customer to either have favourable disposition or otherwise depending on the experience. Customers will be encouraged to pursue the service consumptions and also have their attitudes and behaviors affected toward the service provider if the ambient conditions of the physical environment is carefully manipulated (Nguyen and Leblanc, 2002). In forming customers' impression the elements in the ambient condition plays a very crucial role and they are very important components of the service that give signals to customers and create a perceptual image in the minds of customers (Kotler, 2013). Bitner (2004) also posits that the factors in the ambient conditions have strong signals which are very influential in communicating the image and aim of the business to its customers.

Corporate Identity: Corporate identity includes the name, signs, symbols, artifacts or a combination of these that support the firms' corporate image and brand identity. For instance, when you visit a health care facility you will see signs that will smoothly guide you around the facility, as well as statues and logos displayed throughout the complex. Brand identity has meaning well beyond the physical elements. Consumers view brand as an important part of a service, and so they attach meanings to it and develop brand relationships. Corporate identity helps customers to identify a brand or service provider that might deliver the desired quality of service. Corporate identity provides information about products thereby helping the sale of that product. Levy and Weitz (2004) posit that graphics such as pictures have the ability to add character, beauty and uniqueness to the physical environment. Therefore, corporate identity can be strategically and conspicuously displayed to give direction, and appropriately attract attention and augment the core service and it plays a significant role in customer satisfaction, retention and business survival. Adiele and Opara (2014) assert that signs essential in forming first impression, for communicating new service concepts, repositioning a service and in extremely competitive industries where customers are looking for clues to differentiate the organization. When firms display signs displayed on the exterior or interior of a structure they are communicating clearly with the world in a nonverbal form. These signs may be in form of labels (e.g., name of company, name of department), directions (e.g. entrances, exits), and others which may communicate rules of behaviour (e.g. no smoking, speed limit, etc.). There are many items in the physical environment that implicitly

or explicitly communicate messages to the public and users. In a less explicit communication, the quality of materials used in construction, artwork, presence of certificates and photographs on walls, floors coverings and personal objects displayed in the environment can all communicate symbolic meaning and generate an overall esthetic impression. Furthermore, McCaskey (2000) holds that certain cues in an office environment such as size placement of desk may denote status and be used to reinforce professional image.

Customer Patronage

A patron is someone that buys from a brand, speaks favourably about the brand and its services, pays less attention to competing brands, is less price-sensitive and adopts new services and advancements from the brand (Nyakweba *et al.*; 2015). Udonde and Eke (2023) opined that Patronage is burn out of a desire to be devoted to an organization either on basis of product quality or perceived value associated with the product. Customer patronage is principally important because firms bank on consistent patronage for business sustenance. Customer patronage deals with the processes that customers engage in when selecting a product or brand among alternatives; as well as the factors and attributes used in the selection. Customer patronage improves through encouraging reinforcement and repetitive purchasing behaviour (Nyakweba *et al.*, 2015). Customer patronage according to behavioral scientists, results from a sample that gets reinforced through satisfaction, and leads to recurrence purchase (Nyakweba *et al.*, 2015); while cognitive psychologists opposes that customer patronage forms through mental processes, based on the believe that customers engage in extensive problem solving behavior involving services.

Certain factors such as boredom and dissatisfaction with a service, availability of new service providers and increased concern over price are the reasons for decline in customer patronage. Patronage is burn out of a desire to be dedicated to a business either based on its service quality or apparent service qualities. Hence, the extent to which a customer will patronize the services of a health care depends on how the customer perceives the health care physical environment (servicescape) and how the customer also think and sense that the condition of the service environment is stable with his / her personality. Health care industries often compete for customers in order to increase their market share. The importance of repeat customer patronage is that an increase in sales volume will be achieved and meaningfully impact on the company’s profitability level.

Conceptual Model

The underpinning conceptual model was drawn from the research: Physical evidence and customer patronage model.

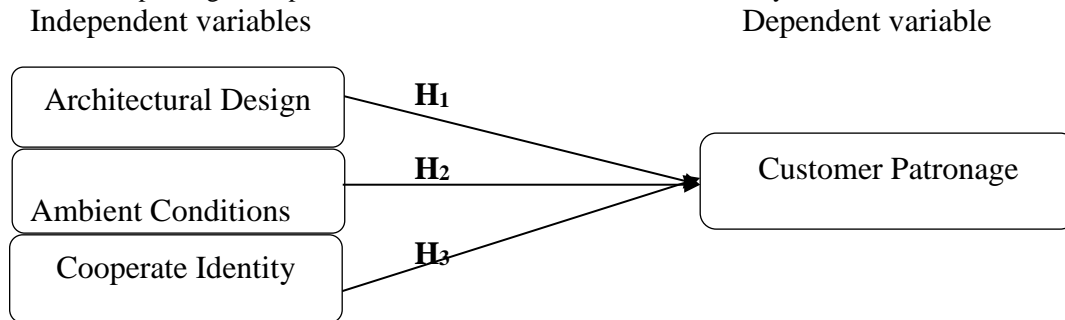


Figure 2.1: Researcher Model: Physical evidence and Customer Patronage Model.

Source: Researcher’s Conceptualization, (2022)

Based on the research objectives, the conceptual model was constructed. This model was developed showing determinants of physical evidence to include architectural design, ambient conditions and cooperate identity as key underpinning towards customer patronage. This model is important because it consists of variables that can be controlled by the health care industry to influence their customer’s patronage behaviour.

Theoretical Review

Theory of Reasoned Action (Fishbein and Ajzen, 1975)

The theory of reasoned action (TRA) was proposed by Fishbein, M.A and Ajzen, I. in 1975. The theory states that a person’s behaviour is determined by its behavioural intention to perform it. This intent is itself determined by the person’s attitudes and his subjective norms towards the behaviour. Fishbein and Ajzen (1975) describe the subjective norms as the person’s perception that most people who are vital to him think he should or should not perform the behavior in question Fishbein and Ajzen, (1975). This theory can be concise by the following equation: Behaviourial Intention = Attitude + Subjective norms.

Empirical Review

Previous studies have indicated that the environment in which service is delivered has impact on customers’ attitude. Onuoha and Nnenanya’s did a study on the effect of service-scape on customer patronage of fuel stations in Abia State. The study showed that service-scape dimensions like ambient conditions, spatial layout have significant impact on customer patronage (Onuoha

and Nnenanya, 2017). Similarly, Amue, Adiele and Friday (2013) detected that ambient conditions, signs, spatial layout, symbols and artifacts as aspects of physical settings recount for patronage of 3star Hotels in Nigeria’s Federal Capital Territory Abuja. Clay, Munyaradzi and Kossam (2013) in another study found that ambient factors influence customer patronage. Additionally, Babin and Attaway (2000) establish that the service environment can stimulate positive emotions which help to determine value that inspires customers to repeatedly patronize a particular service provider; while Stedman (2003) and Ryu and Han (2010) opined that the colourful setting of a physical environment describes the extent of customer general satisfaction and loyalty. Furthermore, Wilson *et al.* (2008) assert that physical environment is vital to service delivery due on its capacity to close the gap between customers’ expectation and actual service delivery; just as Han and Ryu (2009) found that the innovative interior design, pleasing music, unique color, scheme, ambience, spacious layout, appealing table settings, and attractive service staff significantly influence customer patronage and loyalty to service providers.

Gap in the Empirical Literature

In all the studies conducted by previous researchers, none of the studies examined the effect of physical evidence on customer patronage of health care services in Uyo, Akwa Ibom State by taking into consideration the physical evidence factors as stated in the present study. For instance, in the study of Onuoha and Nnenanya (2017) selected fuel stations in Abia State, Nigeria was considered and Amue, Adiele and Friday (2013) studied 3star Hotels in Nigeria’s Federal Capital Territory Abuja. Thus, this present study would contribute to the literature by taking into consideration the effect of physical evidence on customer patronage of health care services in Uyo, Akwa Ibom State using three determinants factors of physical evidence; architectural design, ambient conditions and cooperate identity and would provide insights for conclusion and recommendations. Hence, the need for the study.

RESEARCH METHODOLOGY

This study focused on determining the effect of physical evidence on customer patronage of health care services in Uyo. The study was domiciled in service marketing and the units of analysis were patients of selected health care facilities within Uyo metropolis, the capital of Akwa Ibom State, Nigeria. The Descriptive Research Design was used to carry out this work. Since the work centers on determining the effect of physical evidence on customer patronage in health care services in Uyo, the survey method was used. The population for this study includes patients who had visited the health care facilities as at the time this research was conducted. Five (5) health care service providers within Uyo metropolis was selected for this study and they include; University of Uyo Teaching Hospital, Anua Teaching Hospital, Primary Health Care Centre, Ikot Okubo, Primary Health Care Centre, Barrack Road and Primary Health Care Centre, Itu. These health care facilities were selected because they suit the purpose for the study and they are public owned health care facilities which are easily accessible to all classes of people.

Given the largeness of the infinite population, it would be impossible to carry out a study of the whole population. The sample size was determined using the Top-man Formula for sample sizes were the population is finite but not known.

$$n = \frac{Z^2 (pq)}{e^2}$$

Where n=sample size

Z=value of Z-score associated with the selected degree of confidence (1.96 for 95% Confidence level)

e=estimated standard error (5%)

p=probability of success (0.5)

q=probability of failure (1-p)

$$n = \frac{(1.96)^2(0.5)(1-0.5)}{(0.05)^2}$$

$$n = \frac{(3.8416)(0.5)(0.5)}{0.0025}$$

$$n=384.16$$

Since the sample size cannot be in fraction or decimal, the sample size will be approximated to the nearest whole numbers. Thus, n= 384.16=384 (approximation). Therefore, the sample size of 384 respondents was used, where 384 copies of questionnaire were administered to the patients of the five selected health care facilities who visited the service provider as at the time of the research. The tool adopted by the researcher to achieve the stated objectives of the study was the questionnaire. Using convenient sampling, 384 respondents were chosen from the 5 different healthcare facilities within Uyo metropolis and its environs. Convenience sampling is a kind of non- probability or non-random sampling in which members of the target population are selected for the purpose of the study. If respondents meet certain practical criteria, such as geographical proximity, availability at a certain time, easy accessibility, or the willingness to volunteer, thus it is enough to verify the potential respondent’s eligibility to answer. In conducting this study, a fully structured questionnaire was used as an instrument in order to gather information from the respondents.

It consists of the closed-ended multiple choice questions and Likert-scale questions which enable respondents to express their level of agreement and select the answer that suits them best. A five point Likert scale was adopted by the researcher for the questionnaire which was rated as follows:

Strongly Agreed (SA)	=4
Agreed (A)	=3
Disagreed (D)	=2
Strongly Disagreed (SD)	=1
Undecided (UD)	=0

DATA ANALYSIS, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Here, the numerous data collected were analysed and presented in accordance with the requirements for the study.

Reliability Test and Validity of Data Collection Instrument

Reliability: A convenience sample of 38 respondents was used to pre-test on a test re-test basis. The questionnaire was used to calculate the correlation coefficient, an estimate of the reliability of the data collection instrument. Using Pearson correlation coefficient, a correlation coefficient of .89 was obtained. This indicated a high reliability of the research instrument.

Validity: The questionnaire had to undergo face and content validity before being administered on the respondents. The content validity was estimated as the questionnaire items were scrutinized by four senior lecturers in the department of marketing.

Test of Hypotheses

The hypotheses of the study were tested with the use of t-statistics, probability value (p-value) and F-ratio as criteria for accepting or rejecting any of the hypotheses (null or alternative hypothesis) computed using simple linear regression.

Hypothesis One

The simple linear regression statistics were computed and presented on the Table 1:

Table 4.1: Simple Linear Regression Output

Variable	Beta (β)	t-Stat.	P-Value	Remark	R	R ²	Adj R ²	F-ratio
Constant	0.640	5.645	0.000	Significant	0.917	0.840	0.840	1875.954, p<0.05
AD	1.095	43.312	0.000	Significant				

*Dependent Variable=CP

Source: Computed by the Researcher, (2022)

In testing the hypothesis, architectural design (AD) was regressed against customer patronage. The result of the simple regression analysis showed the model to examine the effect of AD on customer patronage of health care services in Uyo, Akwa Ibom State. **Customer Patronage = 0.640 + 1.095AD**. The result showed that the coefficient of AD had positive effect on customer patronage. This means that AD has positive and direct effect on customer patronage. The results of the t – statistic denotes that the coefficient was statistically significance because observed values of t – statistic (43.312) was greater than its P-values (0.000). The results of the F – statistical test showed that the overall regression of the hypothesis one was statistically significance because observed value of the F – statistic (1875.954) was greater than its p-value (0.000). Again, our result shows that the Pearson product moment correlation analysis (r) was 0.917. The strength of relationship between the two variables was high. However, we rejected the null hypothesis and concluded that AD had a significant effect on customer patronage on health care services in Uyo, Akwa Ibom State.

Hypothesis Two

The simple linear regression statistics were computed and presented on the Table 2:

Table 4.2: Simple Linear Regression Output

Variable	Beta (β)	t-Stat.	P-Value	Remark	R	R ²	Adj R ²	F-ratio
Constant	0.650	6.401	0.000	Significant	0.932	0.869	0.868	2351.338, p<0.05
AC	1.109	48.491	0.000	Significant				

*Dependent Variable=CP

Source: Computed by the Researcher, (2022)

In testing the hypothesis, ambient conditions (AC) were regressed against customer patronage. The result of the simple regression analysis showed the model to examine the effect of AC on customer patronage of health care services in Uyo, Akwa Ibom State. **Customer Patronage = 0.640 + 1.109AC**. The result showed that the coefficient of AC had positive effect on customer patronage. This means that AC has positive and direct effect on customer patronage. The results of the t – statistic denotes that the coefficient was statistically significance because observed values of t – statistic (48.491) was greater than its P-values (0.000). The results of the F – statistical test showed that the overall regression of the hypothesis two was statistically significance because observed value of the F – statistic (2351.338) was greater than its p-value (0.000). Again, our result shows that the Pearson product

moment correlation analysis (r) was 0.932. The strength of relationship between the two variables was high. However, we rejected the null hypothesis and concluded that AC had a significant effect on customer patronage of health care services in Uyo, Akwa Ibom State.

Hypothesis Three

The simple linear regression statistics were computed and presented on the Table 3:

Table 3: Simple Linear Regression Output

Variable	Beta (β)	t-Stat.	P-Value	Remark	R	R ²	Adj R ²	F-ratio
Constant	0.195	2.275	0.024	Significant	0.941	0.885	0.884	2734.409, p<0.05
CI	1.015	52.292	0.000	Significant				

*Dependent Variable=CP

Source: Computed by the Researcher, (2022)

In testing the hypothesis, cooperate identity (CI) was regressed against customer patronage. The result of the simple regression analysis showed the model to examine the effect of CI on customer patronage on health care services in Uyo, Akwa Ibom State. **Customer Patronage= 0.640 + 1.015CI**. The result showed that the coefficient of CI had positive effect on customer patronage. This means that CI has positive and direct effect on customer patronage. The results of the t – statistic denotes that the coefficient was statistically significance because observed values of t – statistic (42.292) was greater than its P-values (0.000). The results of the F – statistical test showed that the overall regression of the hypothesis three was statistically significance because observed value of the F – statistic (2734.409) was greater than its p-value (0.000). Again, our result shows that the Pearson product moment correlation analysis (r) was 0.941. The strength of relationship between the two variables was high. However, we rejected the null hypothesis and concluded that CI had a significant effect on customer patronage of health care services in Uyo, Akwa Ibom State.

DISCUSSION OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

Discussion of the Findings

The result shows architectural design has a significant effect on customer patronage of health care services in Uyo, such that the customer takes into consideration the architectural layout of the health care facilities when making repeat purchases. This architectural layout includes; hospital bedspreads, patient's beds, lighting, hand washing and disinfectant stations, health care equipment, proper ventilations, floor coverings; and quality instruments and furniture. All these can play significant role in delivering an image and in creating an overall aesthetic impression and can serve as important clues by which customers will evaluate the overall service experience.

The result from the analysis shows that ambient conditions have positive effect on customer patronage. This shows that a customer patronizes a health facilities based on the friendliness, responsiveness, reliability and empathy of the service provider which consciously or subconsciously help the consumer to experience the service. Also, the finding reveals that cooperate identity have significant effect on customer patronage of health care services in Uyo. This implies that the name, signs, symbols, artifacts or a combination of these can influence a customer patronage of a particular health care facility.

Conclusion

From the data analysis, it is obvious that physical evidence is a viable service marketing communication tool. In line with the findings of the study, the following conclusions were reached; the study has established that physical evidence has positive significant effect on customer patronage of health care services in Uyo, Akwa Ibom State. This positive significant effect implies that, an increase in the hospital's architectural design, ambient conditions and corporate identity will influence customer continuous patronage of the health care facility.

Recommendations

The following recommendations are made from the findings of the study.

- i. From the study, it was shown that physical evidence has a positive significant effect on customer patronage of health care services in Uyo, Akwa Ibom State. This means the service industries should influence their customer patronage by paying attention to the servicescape of their business and making their environment an important component of their service marketing strategy.
- ii. Architectural design is seen as having a positive effect on customer patronage and as such, service industries should improve their spatial layout, design and overall surroundings and facilities to influence their customer patronage.

- iii. The study revealed that ambient conditions have a significant effect on customer patronage. On this note, hospitals should always ensure that the ambience for their health care facility is always cool and friendly with their service personnel being responsive and reliable.
- iv. From the study, cooperate identity variable is seen as having a significant effect on customer patronage and as such service industries should ensure the availability of good names, logos, signage and taglines in order to build a positive brand reputation and encourage customer patronage.

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