Users' Psycho-Social and Socio-Economic Characteristics in an Inclusive Health Resort Design, Port-Harcourt, Nigeria

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Article

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Abstract: Health comprises physical, mental and social dimensions whose interactions influence users' experiences. Health experiences are within the context of environments. These contexts are definitive contributors to experiences—primarily because of the link to social dimensions as human beings—psychological and economic. Therefore, the study aims to investigate health resort users' psycho-social and socio-economic characteristics to improve their access to quality healthcare. The objectives are identifying the socio-economic characteristics of an inclusive health resort, analysing the psycho-social characteristics of the inclusive health resort user, and analysing the effects of users' psycho-social and socio-economic characteristics on their access to healthcare. The study employs the mixed research method (qualitative and quantitative). The researchers engaged in a pragmatic research philosophy that underscores positivist and interpretivist paradigms. The data collection instruments include survey questionnaires, an interview guide with a digital recorder, a direct participant observation schedule, field notes and photographs. The data analysis process involves the clustering and categorisation of data and examining concepts and themes. The research findings show a correlation between the users' socio-economic status and access to quality healthcare in an inclusive health resort. The result further reveals that psycho-social and socio-economic characteristics of health resort users are quality healthcare access predictors. Therefore, the users' social, psychological, and economic status should play a vital role in the design of an inclusive health resort by all stakeholders.

Keywords: health seekers' behaviour; user psycho-social characteristics; socio-economic characteristics; health resort design; social factors

1. Introduction

Recent studies indicate that the occurrence and potential of social factors lead to poor health [1,2]. Hence, several health institutions, systems and organisations are interested in addressing unmet social needs via services [3]. Services fundamentally affect our lives and well-being as individuals, families, and communities [4]. Healthcare is a service. And health is connected to social factors, which are conditions for any human environment [5]. These conditions include economic, psychological, and social factors. In the quest for health services, needs and choices are subject to social factors. Social factors constrain the response to meet our health-related needs and influence behavioural patterns. Understanding social dimensions prevalent among health resort (services) users may inform decision-making in health-resort architectural design programming [6]. It corroborates recent studies that opine that the success of health resorts as care facilities may result from understanding the users' behaviour to ensure services meet needs and choices [7]. Social factors here are two-fold—psychological and economic. However, according to Abraham Maslow's hierarchy of needs, human needs are classified into eight interdependent categories [8].

Considering current global trends of disease outbreaks such as COVID-19 and their societal impacts (including economic and psychological health), health is pluralistic in influence. The study focuses on psycho-social and socio-economic characteristics and the social connections of a health-

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seeking group—health resort users. Therefore, the research aims to investigate the psycho-social and socio-economic features of health resort users to improve their access to excellent health. The study seeks to test the theory that these characteristics influence components of human behaviour on their needs and choices in the usage of healthcare facilities/ services (health resorts). Thus, the questions include: What are health resort users' socio-economic characteristics? What are the psycho-social features of health resort users? What is the relationship between user's psycho-social and socio-economic characteristics on their access to healthcare?

2. Literature Review

After the COVID-19 pandemic outbreak, achieving and maintaining good health has become vital [9,10]. Healthy living is a basic human need and a fundamental right [11]. Health encompasses three dimensions—physiological, psychological, and social [12,13]. The complex 'mind-body-health-well-being' permits us to share in loving, enduring relationships with family and friends, contribute to our communities, or fully participate in work [14]. Interacting factors affect mental health and social, economic, psychological, physiological, behavioural, and environmental influences [15].

The built environment includes several material determinants of health that shape the social, economic and environmental conditions for good health [16]. Environmental and socio-economic contexts influence people's actions to improve their health status. Socio-economic and psycho-social factors affect access to healthcare [17]. In the built environment, healthcare buildings can support health, well-being, and social interactions [18]. Health resorts are tranquil places with unique therapeutic landscapes and attractive public spaces for improving users' quality of life (QoL) [19,20]. Health resorts have a connection with disease prevention, health education and health-seeking behaviour [21]. The user needs and user-humanist perspective on spaces and features should be the basis for designing health resorts [22,23].

Human conduct is cognitive, emotional, or physical activities that influence behaviour, needs and choices [24]. The built environment interventions (healthcare facilities) provide a sustained effect on behaviour [25]. Users' behavioural intentions are generally associated with health resort attraction indicators [26]. These intentions include affordable social activities and health consciousness, which define health-seeking individuals [27,28]. Hardan-Khalil (2020) observed that health promotion behaviours correlate with age, education, psychological stress, health, and social support. Health-seeking behaviours (HSB) are closely linked with health status and extend to economic development. Also, [29] reported that, in Nigeria, appropriate HSB is high among civil servants. Behaviour influences health, and a healthy lifestyle decreases health risks [30,31]. Socio-economic status (SES) and the family system promote HSB [32]. Hence, understanding the interplay between social and behavioural factors and their relevance to healthcare service utilisation has become a vital healthcare policy consideration [33]. According to [34], the predictors of the perceived quality of healthcare were the age of respondents, level of education, house type lived in, the number of persons in the house, toilet facility types, the primary source of water supply, waste disposal practices, and level of education.

[35] revealed that healthcare assessments include social dimensions of health in patients' assessment. [36,37] explained that reducing social isolation improves health and disease interventions. The underlying causes of health disparities are social and structural health determinants, economic and educational disadvantages, healthcare access and quality, and individual behaviour, among other factors [38,39]. Several easily measurable social factors determine the health-related quality of life (HRQoL) [40]. The existing literature presents a socio-economic index among the beneficial indices of a natural health environment, such as a health resort [41]. People's SES affects their access to nature and quality health services [42–45]. Money and social support are variables of homelessness and health risk [13,46]. Again, Quality of life (QoL) correlates with SES [47]. The RUCAS-analytic framework shows a link among socio-economic variables, health inequities, the built environment and health [48–50]. Socio-economic variables, such as education and gender, determine work type, workplace conditions and earnings [51,52]. Psycho-social health outcome combines SES and gender [53].

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[54] identified and grouped psycho-social needs along with Abraham Maslow's hierarchy of needs as psychological, safety, social, esteem, aesthetics, self-actualisation and self-transcendence. [55] recon that social factors affect disease preventive measures. Similarly, [56] opine that improving a sense of community by reducing social isolation and loneliness enhances health. [57] agree that the quality of living spaces is a quality health determinant. In health resorts, research links nature experience to psychological dimensions, perceptions and interactions with stimuli from the natural world through sensory modalities-sight, hearing, taste, touch, and smell [58]. Psycho-social factors influence the senses that connect humans to the environment [14,59,60]. Sensory features are inevitably present in architectural design [61].

3. Materials and Method

The researchers designed the methodology section of this study to address the research aim and objective. The study investigates health resort users' psycho-social and socio-economic characteristics to improve their access to quality healthcare. The intents include identifying the socio-economic characteristics of an inclusive health resort, analysing the psycho-social characteristics of the inclusive health resort user, and studying the effect of socio-economic and psycho-social characteristics of users on their access to quality healthcare in a health resort. However, health has physical, mental, and social components, so assessing users' characteristics may be challenging. The researchers must consider the feasibility of collecting data, sampling, ease of observation, or data availability. Therefore, the study employs the mixed research method (qualitative and quantitative). The study used a pragmatic research philosophy that measures from the positivist and interpretivist paradigms, as presented in Figure 1. This mixed-method approach allows for a healthy triangulation of quantitative and qualitative data and reliable responses to the research questions raised in the introduction. The study population is Port-Harcourt residents', in Port-Harcourt, Nigeria. According to the United Nations, the estimated population of the Port Harcourt Metropolitan area is 3,171,076. The 2022 population of the Port Harcourt metro area is 3,325,000, at a 4.86% growth rate from 2021 [62]. The population elements are 1. Port-Harcourt Residents; 2. Professionals/experts in Port-Harcourt local government.

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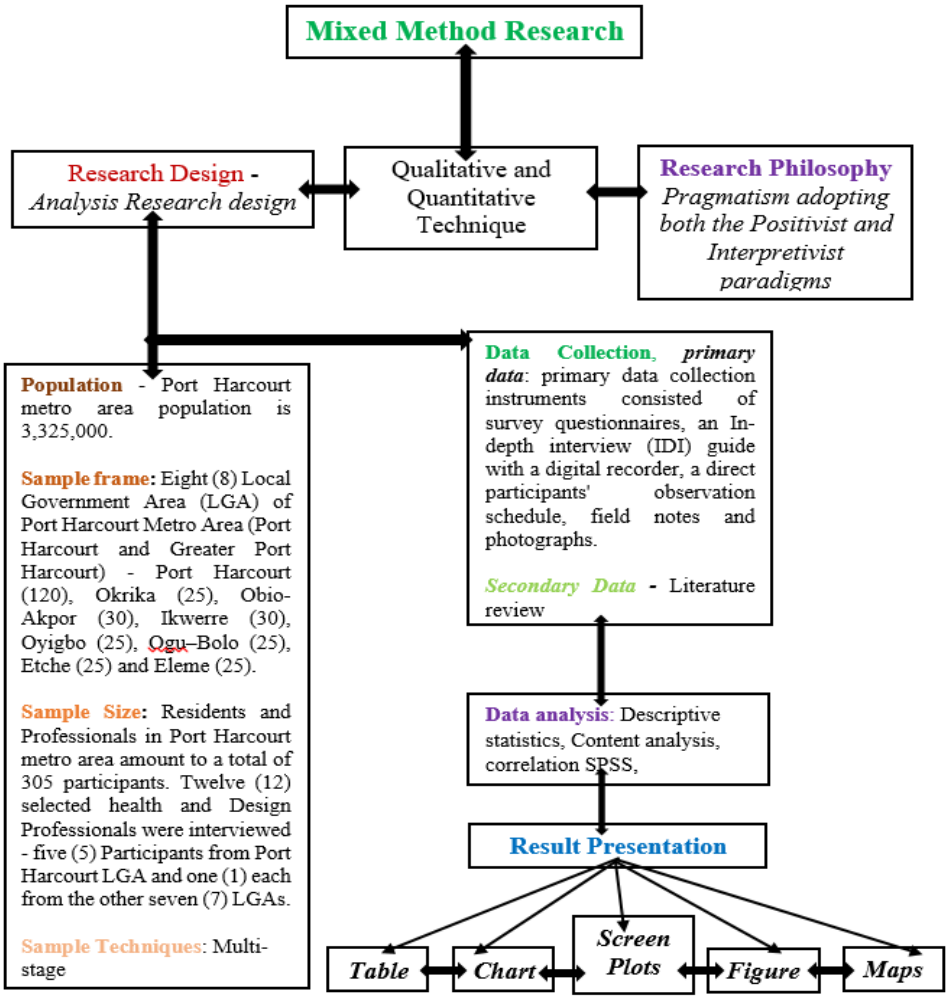

Figure 1. Structure of the Research Methodology; Source: Authors (2024).

3.1. Sampling Techniques

According to [63], the projected population of the purposely selected Port Harcourt metro area is about 3,325,000 residents. [64] determined the sample size by using simple calculations. [65] argued that the result from the sample might be an overview of the entire population as long as it is representative. Therefore, the formula for the sample size is in equation (i) at the confidence interval of 95% with a significance level of 5%.

The Formula for sample size: n ==N/1+N (e) 2 ---------- (i)

Where:

n = Sample size to be studied

N = Population size

e = margin of error (0.05)

n = 3,325,000/1+3,325,000 (0.05)2

n = 3,325,000/1+8312.5

n = 399.95

The sample in this study is 399.95

From the above formula, the required sample size for this study was 399 people. The researcher used purposive and random sampling to select the participants. The sample sizes for the Port Harcourt metro area, Port Harcourt, were picked from the total eligible households listed and some professionals.

3.2. Research Design

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[66] explain that research design is the specific procedure involved in the research process: data collection, analysis, and report writing. The research design in this research uses an analysis research design. Therefore, the theories underpinning the study define the research method used [67]. Based on all the considerations, the authors chose the mixed-method research approach. In mixed methods research, the researcher blends quantitative and qualitative research techniques, concepts, or language into a single analysis and theoretically by providing a reasonable and realistic alternative. However, a mixed analysis involves quantitative and qualitative data analysis techniques and allows a rational approach and framework within the same study. Its inquiry logic includes inference, deduction, and abduction [68]. A mixed-methods study is an effort to legalise several approaches to address research questions rather than limiting the researchers' choices. It is an expansive and innovative type of analysis. It is inclusive and balanced and indicates that researchers take a broad approach to the selection methods, study thought, and behaviour. It entails collecting both types of data at the same time; assessing information using parallel constructs for both data types; separately analysing both data types; and comparing results through side-by-side comparison in a discussion, transforming the qualitative data set into quantitative scores, or jointly displaying both forms of data [69]. Therefore, mixed methods are effective for understanding gaps between quantitative and qualitative data and participants' views. Mixed methods ensure those study findings are grounded in participants' experiences. Promotes scholarly interaction by improving the validity and reliability of the resulting data and strengthens causal inferences by providing the opportunity to observe data convergence. Since health and well-being are multi-faceted issues, this paper has employed the sequential explanatory mixed-method approaches (qualitative and quantitative) to investigate the effect of Health resort user characteristics on their access to quality healthcare in Nigeria.

3.3. Communal Survey

The researcher conducted social surveys among two respondent groups: health facilities users (residents) and Amenities providers (design/planning and health experts). The questionnaire asked respondents about their preferences for healthcare in the inclusive health resort and socio-demographic criteria such as age and overall situation. The study connected the following questions with the issues of psycho-social and socio-economic characteristics. Therefore, the co-author and three (3) other research assistants-M.Sc. Students in the architecture department at Rivers State University (RSU), Nigeria, distributed the questionnaires. It was a controlled distribution systematically organised and conducted on weekends (usually Friday through Sunday), in the mornings and evenings (10:00–12:00 am and 5:00–7:00 pm). The research assistants randomly distributed the surveys to residents-in the Port Harcourt metro area and professionals-designers/planners and health officials-in the Port Harcourt Local Government Area (PHALGA). This approach provided the necessary tuning of research and enabled the identification of various daily routines and behaviours among residents. The authors retrieved 305 filled questionnaires (270 from Port Harcourt metro area residents, 35 from staff/professionals) reflecting the socio-demographic characteristics of residents in the study area.

3.4. Recruitment Procedure

Participants for the study were 12 experts or professionals: Built Environment Professionals-BEPs and health and medical professionals-HMPs). Each in-depth individual interview (IDI) lasted for 60 to 90 minutes. The investigators distributed 12 signed consent forms to participate in the study, and they all expressed interest in the interview exercise. Following the recommendation in qualitative research to ensure a suitable representation of the lived experiences and diversity of the experts, the investigators used a purposive sampling method with six criteria: age, gender, marital status, education, occupation and years of experience, as shown in Table 1 below.

Table 1. Demographic Information of the Participants.

S/N	Name	Age	Sex	Marital	Education	Occupation	Years of

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				Status			experience
1	AB	52	M	Married	MD	Medical Doctor	25
2	KSA	55	M	Married	PhD	Psychiatrist	30
3	LBO	61	M	Married	MBChB	Medical Doctor	35
4	SA	56	M	Married	M.PH	Public health	28
5	ED	55	M	Married	PhD	Biomedical Engineer	26
6	SY	47	F	Married	MD	Medical Doctor	24
7	QC	52	F	Married	PhD	Quantity surveyor	26
8	BB	32	M	Married	M.Sc.	Architect	17
9	AC	65	M	Married	B.Eng.	Civil Engineer	35
10	OA	39	M	Married	PhD	Medical Doctor	15
11	YM	46	M	Married	MBBS	Medical Doctor	19
12	HA	43	F	Married	PhD	Architect	20

Note: Mean Age: 42.3, Mean Years of E: 25.4
MD- Doctor of Medicine, PhD- Doctor of Philosophy, MBChB- Bachelor of Chirurgery, M.PH- Master of Public Health, M.Sc.-Master of Science, B.Eng.-Bachelors of Engineering, MBBS- Bachelor of Surgery, M-Male, F-Female

3.5. Data Collection

The authors extracted data from both primary and secondary sources. The primary data collection instruments consisted of survey questionnaires, an In-depth interview (IDI) guide with a digital recorder, a direct participants' observation schedule, field notes and photographs. The authors distributed three hundred and ninety-nine (399) questionnaires among the Healthcare facilities users and industry specialists within the study areas, as shown in Table 2. Out of 399 questionnaires distributed, the researchers retrieved 305. The authors interviewed twelve (12) selected professionals/experts (health officials and design),—five (5) Interviewees from Port Harcourt LGA and one (1) each of the other seven (7) LGAs. The study also used an observation schedule, field notes, and photographs to record data on the available healthcare facilities in Port Harcourt. The authors used a semi-structured questionnaire to identify healthcare facility users' psycho-social and socio-economic characteristics. The co-author and three (3) research assistants undertook the data gathering process for twelve (12) weeks –morning and evening during the weekend, Fridays to Sundays.

Table 2. Number of Questionnaires Administered and the Response Rate.

S/N	Port Harcourt Metro Area (Port Harcourt and Greater Port Harcourt – Eight (8) Local Government Areas (LGA)	No. of Questionnaires administered	No. of questionnaires retrieved	Response Rate (%)
1	Port Harcourt LGA (PHALGA)	150	120	80
2	Okrika LGA	38	25	66
3	Obio-Akpor LGA	39	30	77
4	Ikwerre LGA	40	30	75
5	Oyigbo LGA	34	25	74
6	Ogu–Bolo LGA	34	25	74
7	Etche LGA	34	25	74
8	Eleme LGA	38	25	74
	Total	399	305	76%

According to Table 1, Port Harcourt LGA (PHALGA) had an 80% success rate, and Okrika LGA recorded 66%. Obio-Akpor LGA had a 77 per cent response rate, Ikwerre LGA recorded 75 per cent, Oyigbo LGA, Ogu–Bolo LGA, Etche LGA and Eleme LGA logged 74 per cent each (Table 1).

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3.6. Ethics

During the survey data collection process, the research assistants captured no photographs of respondents during the interview. This aspect involves direct participation, so the co-author and three research assistants distributed the questionnaires. Therefore, there was no need for an ethical approval certificate for the questionnaires. However, for the participants interviewed, a consent form approval came from the ethics committee.

3.7. Data Analysis

The study used the explanatory sequential mixed approach in the analysis (i.e., collecting quantitative data first, then using qualitative data to explain the quantitative findings). The Users' psycho-social characteristics were analysed using descriptive statistical analysis of the 7-Likert scale, and the result was in tables, charts, screen plots, and graphs. The questionnaire survey employed the co-author and three (3) research assistants across the eight LGAs of the Port Harcourt Metropolitan Area. The co-author covered Port Harcourt LGA (PHALGA), and the other three research assistants covered seven (7) LGA. The investigators used IBM-SPSS version 26 and Microsoft Excel to code and analyse the data. The analysis process involves data clustering and categorisation and examining concepts and themes. The study identifies the socio-economic characteristics of an inclusive health resort through questionnaires and interview guides to the residents and professionals across the eight (8) LGAs. In analysing the psycho-social characteristics of the all-inclusive health resort user, Descriptive means analysis on data collected from questionnaires administered to residents and professionals and interviews with professionals from across the Port Harcourt Metropolitan Area to ensure an optimum result. The researchers analysed objective three (- studying the effect of the users' socio-economic status on their access to quality healthcare in a health resort) using Correlation coefficients (r) to check the relationship between the user characteristics (psycho-social and socio-economic) and their access to quality healthcare across the selected Healthcare facilities case studies in Port Harcourt.

4. Results

The authors obtained psycho-social and socio-economic characteristics of health resort users using survey questionnaires. The researcher distributed *one* short of four hundred questionnaires with a return rate of 76% (i.e., 305 questionnaires). The authors presented the twelve (12) participants' experiences and expertise through direct quotes.

4.1. Result of Socio-economic Characteristics of Health Resort Users

According to the medical director of Okrika General Hospital, Okrika LGA, Port-Harcourt: "Socio-economic characteristics include occupation, education, income, wealth and housing". He added that "these characteristics can significantly affect how well and how long people live, and their ability to make healthy choices, afford medical care, and manage stress".

(Medical Doctor, IDI: 2023)

The medical director of General Hospital Ogu, Ogu–Bolo LGA, Port-Harcourt, said: *"During an assessment, SES is typically broken into three levels (high, middle, and low) to describe the three places a family or an individual may fall into when placing a family or individual into one of these categories, or all of the three variables (income, education, and occupation)"*. According to him

"People's SES defines their occupation, income, and education. Lower SES, such as low-income neighbourhood living or having a high-stress, low-control job, is often linked to a wide range of health problems and higher mortality. Therefore, the higher the SES, the healthier they tend to be – a phenomenon often termed the social gradient of health".

(Medical Doctor, IDI: 2023)

The socio-economic characteristics recorded include gender, age, marital status, highest educational qualification, employment status and income level (Figure 2).

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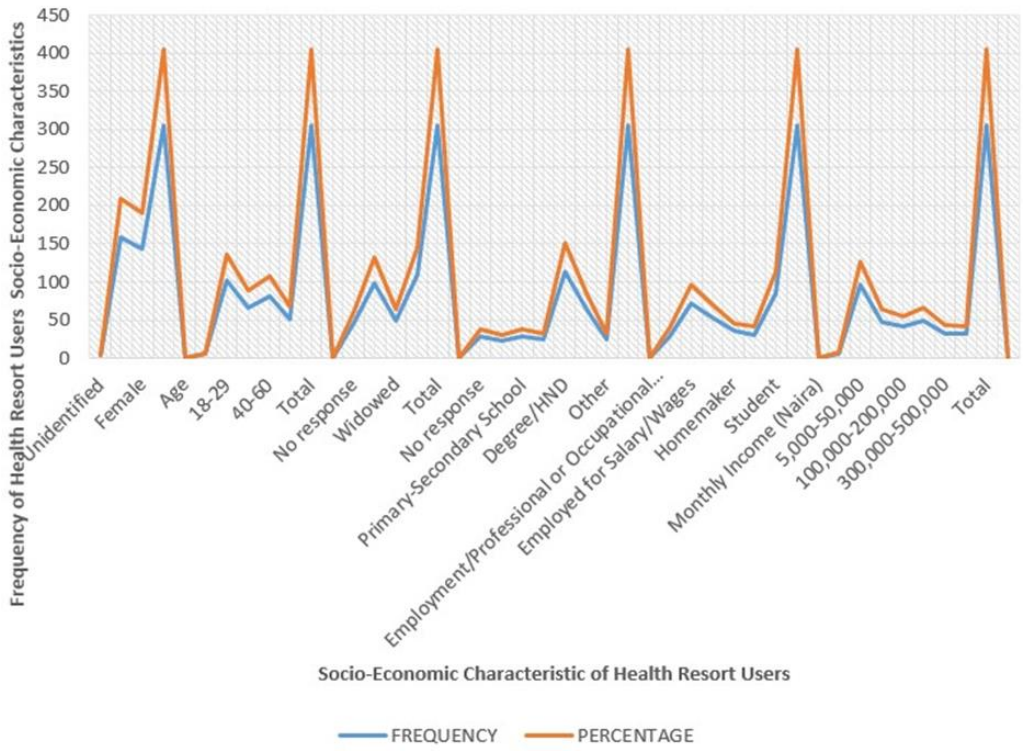

Figure 2. Socio-economic Characteristics of Health Resort Users.

The study's result represents a highly educated population, with most respondents having completed higher education ranging from NCE/OND at 8%, first degree/HND at 37.7%, and postgraduate studies at 21% (Table 3 above). Fewer than 8% of those surveyed lack formal education. It shows that most respondents have the educational background necessary to be part of the research. The study's population is intellectually endowed to be aware of and seek quality healthcare services. Most respondents are either students or those who work for a salary or pay, with students making up a 4% larger share of respondents than wage earners. 41% of the population makes a living via paid employment and self-employment and is considered an active earner. Less than 21% are high earners, defined as those earning more than 300,000 Naira monthly, whereas 77% receive between 5,000 to 300,000 Naira. Quality health service is expensive to procure [70,71]. Therefore, in a well-informed population interested in maintaining quality health, the question is what quality healthcare is readily accessible (from a User's socio-economic perspective). To further bolster this socio-economic character of the population, with the depreciating value of the national currency (Nigerian Naira) to global currencies (e.g., United States Dollar), the low-to-average income earners, which make up the most population (77%) are at an increased risk of reduced access to quality health services.

Table 3. Selected Local Governments and Health Facilities.

S/N	Port Harcourt (PH) Metro Area (PH and Greater pH – Eight (8) Local Government Areas (LGA)	Health Facilities in respective Local Government Areas (LGA)
1	Port Harcourt LGA (PHALGA)	Military Hospital, New Mile One Hospital & Rivers State University Teaching Hospital
2	Okrika LGA	Okrika General Hospital
3	Obio-Akpor LGA	University of Port Harcourt Teaching Hospital
4	Ikwerre LGA	General Hospital Isiokpo
5	Oyigbo LGA	Heritage Medicare Hospital
6	Ogu–Bolo LGA	General Hospital Ogu

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7	Etche LGA	Okomoko General Hospital
8	Eleme LGA	General Hospital, Ebubu Eleme
	Total	10

4.2. Result of Psycho-Social Characteristics of the Inclusive Health Resort User

The selected health facilities within the study area were ten (10) of the eight LGAs, as shown in Table 3. Each facility is from seven (7) local governments in the Port Harcourt metropolis—three (3) health facilities from the PHALGA. PHALGA is the largest and most populated LGA in the Port Harcourt metropolis. Hence, it covers more facilities than other LGAs.

However, the HOD, Psychiatric at General Hospital, Ebubu Eleme, Eleme LGA, Port-Harcourt, said: "*Psycho-social characteristics influence an individual psychologically and socially*. Explaining that: "*Such characteristics can describe individuals with their social environment and how these affect physical and mental health*". *Also, he believes that "Better health can lead to healthier lifestyles, better physical health, greater opportunities for educational attainment, greater productivity and economic participation, better relationships with people, more social cohesion, and improved quality of life*".

(Psychiatric, IDI: 2023)

The CMO of Heritage Medicare Hospital, Oyigbo LGA, Port-Harcourt, *describe psycho-social characteristics as the influences of social factors on individual mental health and behaviour*. "*Psycho-social adaptations are important because they affect the quality of life and are on the causal pathway to somatic disease*". He further said:

"*Psycho-social characteristics in healthcare included social resources (social ties, relationships, group work, social integration and emotional support), psychological resources (perceived control, self-esteem, sense of place and privacy, sense of home, sense of safety, sense of coherence, and trust), and psychological risk factors (air quality, water quality, quality of sleep, orderliness, cynicism, vital exhaustion, hopelessness, and depressiveness)*". The findings corroborated the literature in Table 4.

(Medical Doctor, IDI: 2023)

Psycho-social characteristics of health resort users connect Abraham Maslow's eight levels of human needs. Thus, sixteen factors corresponding to Maslow's eight tiers, justified through literature, were presented to respondents to gauge the psycho-social traits of health resort users. The researchers listed these sixteen characteristics in Table 5, and literature justifications are in the Empirical Support column. The authors asked the respondents to rate these Characteristics concerning four (4) main facilities identified as making up a health resort, including the hospitality category (hotel and spa), the exercise and recreational category (gyms/fitness centres), and the medical category (hospital).

Table 4. Sixteen (16) Psycho-social Characteristics Measured.

S/N	Psycho-Social Characteristic	Maslow's Tier Of Human Need	Empirical Support
1.	Water Quality	Biological and Physiological	[2,54,55,72,73]
2.	Air Quality	Biological and Physiological	
3.	Thermal Comfort	Biological and Physiological	
4.	Quality of Sleep	Biological and Physiological	[2,59,74]
5.	Sense of Safety	Safety	[2,75]
6.	Orderliness	Safety	[9]
7.	Quality of Intimate Atmosphere	Belongingness and Love	[76]

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8.	Sense of Trust and Acceptance	Belongingness and Love	[77–79]
9.	Value of Lasting Relationships	Belongingness and Love	[80,81]
10.	Features Befit Status	Esteem Needs	[54]
11.	Self Esteem	Esteem Needs	
12.	Sense of Home	Aesthetics and Belongingness and Love	[14,82,83]
13.	Unwind and Rejuvenate	Self-actualisation	[54]
14.	Social Ties, Relationships, Group Work	Belongingness and Love	[52,55,84,85]
15.	Sense of Place and Privacy	Transcendence and Self-actualisation	[86,87]
16.	Aesthetic Experience	Aesthetic	[88,89]

Table 5. Descriptive Means of Psycho-social Characteristics of Health Resort Users across Component Facilities of a Health Resort.

S/N	Psycho-Social Characteristic	Health Resort Component Facilities				
		Hotels / Spas (Accommodation)	**Gyms / Fitness Centres** (Exercise/ Healthy Living Education)	**Restaurant** (Dining)	**Hospitals** (Medical)	**Mean Averages**
1.	Water Quality	4.7133	4.4200	4.8000	3.9467	4.4700
2.	Air Quality	4.6933	4.4733	4.5067	3.8667	4.3850
3.	Thermal Comfort	4.8400	4.4933	4.6467	3.9200	4.4750
4.	Quality of Sleep	4.8933	4.4094	4.3533	3.8533	4.3773
5.	Sense of Safety	4.9333	4.4200	4.3133	4.1600	4.4566
6.	Orderliness	4.7933	4.6467	4.5867	4.1467	4.5433
7.	Quality of Intimate Atmosphere	4.4267	4.1667	4.4067	3.6867	4.1717
8.	Sense of Trust and Acceptance	4.3733	4.6333	4.5067	4.0000	4.3783
9.	Value of Lasting Relationships	4.2067	4.5467	4.2800	3.7933	4.2066
10.	Features Befit Status	4.7333	4.6200	4.7267	3.9800	4.5150
11.	Self Esteem	4.8333	5.0267	4.2733	3.7467	4.4700
12.	Sense of Home	4.5533	3.7200	4.0133	3.2800	3.8916
13.	Unwind and Rejuvenate	4.6333	4.5733	4.3933	3.3133	4.2283
14.	Social Ties, Relationships, Group Work	4.6533	4.6933	4.8333	2.9400	4.2799
15.	Sense of Place and Privacy	5.0867	3.7067	3.9733	2.8267	3.8983
16.	Aesthetic Experience	4.5067	5.2600	4.2333	2.9400	4.2350

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Lowest mean score per variable Highest mean score per variable Lowest overall mean score Highest overall mean score.

The authors ranked the first eleven (11) measured characteristics, as shown in Table 4, on a 7-point Likert scale ranging from very poor to excellent, while the twelfth to sixteenth characteristics were from strongly disagree to agree. As already stated, recall that healthcare is primarily a service, and like all services, it is to meet needs. Also, as a service, healthcare would attempt to satisfy a range of user choices, taking into cognisance the diverse behavioural responses of its service users. The perception of health as a service has guided the development of these sixteen psycho-social characteristics. On close examination, it would be evident that each of the sixteen measured characteristics can be in at least one category of Maslow's levels of human needs. In healthcare (health service), these characteristics are akin to human health on various psycho-social levels.

4.3. Results of Analysing the Effects of Users' Psycho-Social and Socio-Economic Characteristics on Their Access to Healthcare

Good access to healthcare is the ability of patients to get the care and services needed when due [90]. It is essential to providing high-quality healthcare and ensuring that patients receive proper treatment. Therefore, patient access to healthcare benefits include better care, improved health outcomes, reduced costs, disease progression prevention, reduced wait times, and better quality of life. However, research has shown that psycho-social variables, including stress, emotions, and social characteristics, may contribute to the association between socio-economic status (SES) and access to health.

The medical director of Military Hospital, Port Harcourt LGA (PHALGA), Port-Harcourt, corroborated the statement and said: *"From experience, lower SES concomitant with reduced access to healthcare, poorer health outcomes, and increased mortality and morbidity. Similarly, higher incomes are usually associated with better nutritional status and medical services. In addition, people with higher levels of education tend to have better health awareness and health-related knowledge. Consequently, higher SES may be simultaneous with better physical health".*

(Medical Doctor, IDI: 2023)

In another interview with the chief medical director (CMD) of the University of Port Harcourt Teaching Hospital, Obio-Akpor LGA, Port-Harcourt, he said: *"Individuals with low socio-economic status (SES) tend to have less access to healthcare. Adding that SES can significantly affect a patient access to healthcare"*. According to him

"Low SES adults are less likely to receive preventive services for chronic conditions such as diabetes, cancer, and cardiovascular disease". Also: "The consequences of Low SES are significant and include the use of fewer preventive services, poorer health outcomes, higher mortality and disability rates, lower annual earnings because of sickness and disease, and the advanced stage of illness".

(Medical Doctor, IDI: 2023)

Responses show that in the health-seeking experiences of users, accommodation is vital regarding their psycho-social characteristics. In Table 5, ten (10) of 16 characteristics feature accommodation with the highest mean score per variable. Also, the sense of place, privacy, and home, which recorded the lowest overall mean scores, further bolsters users' accommodation-related concerns. It indicates their expectations of healthcare facilities' environment—a homely one offers a sense of place and privacy. And so, from a psycho-social context, users' health-seeking behaviour is influenced by how efficiently a health facility communicates homeliness, privacy, and a sense of place. Responses on the medical component (Table 6) returned the least means scores per variable, consistently across all the psycho-social characteristics. It is because the form of healthcare in Nigeria

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(Port Harcourt) is medical (hospitals). Therefore, if users rate the main form of healthcare in the study area (Nigeria) as low in its psycho-social characteristics, then psycho-social characteristics should be a vital consideration for providing health services.

Table 6. It shows a connection between Users' educational qualifications and access to facilities that benefit their status.

S/N	Psycho-Social Characteristic	Hotel	GYM	Restaurant	Hospital
1	Water Quality	0.078	***0.187**	0.157	0.058
2	Air Quality	- 0.074	0.130	0.027	- 0.004
3	Thermal Comfort	0.067	0.096	0.142	- 0.052
4	Quality of Sleep	- 0.002	0.135	0.121	0.063
5	Sense of Safety	0.098	0.113	0.067	0.080
6	Orderliness	***0.169**	0.141	0.090	0.067
7	Quality of Intimate Atmosphere	0.030	0.093	0.012	- 0.004
8	Sense of Trust and Acceptance	0.095	***0.185**	0.070	0.034
9	Value of Lasting Relationships	0.085	0.125	***0.162**	0.065
10	Features Befit Status	0.118	***0.177**	***0.174**	- 0.025
11	Self Esteem	0.081	0.150	0.042	- 0.008
12	Sense of Home	0.001	0.102	0.129	- 0.002
13	Unwind and Rejuvenate	0.054	-0.015	- 0.001	0.040
14	Social Ties, Relationships, Group Work	0.087	0.081	0.004	0.116
15	Sense of Place and Privacy	- 0.009	0.051	0.071	0.035
16.	Aesthetic Experience	- 0.028	0.074	- 0.033	0.137

*Highlighted r-values reflect variables which returned significant results at an α-level of 5% (0.05)

The correlation test in Table 6 reveals a positive correlation between educational qualification and Users' expectation of orderliness in healthcare facilities, particularly regarding accommodation services. Table 6 further shows a connection between Users' educational qualification and their perception of a facility that befits their status or otherwise. Interestingly, orderliness and perception of facilities befitting Users' status returned the highest overall mean scores, as highlighted in Table 6.

Table 7, on the other hand, presents an inverse relationship between income levels and a sense of safety and sleep quality in health facilities. It could indicate that health service users with greater income levels who are more likely to afford better quality services would have fewer concerns about their safety in health facilities. It could be due to better security services and safety measures in such facilities. Therefore, it offers a complementary environment that favours quality sleep.

Table 7. It shows a correlation between Monthly Income and access to facilities that benefit their status.

S/N	Psycho-Social Characteristic	Hotel	GYM	Restaurant	Hospital
1	Water Quality	0.031	0.076	0.051	0.155
2	Air Quality	***- 0.213**	0.068	- 0.044	0.108
3	Thermal Comfort	- 0.089	0.097	0.044	0.069
4	Quality of Sleep	***- 0.196**	***0.174**	0.044	0.065
5	Sense of Safety	***- 0.176**	0.084	- 0.083	0.039
6	Orderliness	- 0.022	0.074	- 0.017	0.094
7	Quality of Intimate Atmosphere	- 0.092	0.123	- 0.079	0.180
8	Sense of Trust and Acceptance	- 0.040	0.121	0.004	0.105
9	Value of Lasting Relationships	0.149	- 0.040	0.027	***0.162**
10	Features Befit Status	0.061	0.089	- 0.058	0.061
11	Self Esteem	- 0.150	- 0.027	- 0.019	0.076
12	Sense of Home	- 0.086	0.018	0.010	0.116
13	Unwind and Rejuvenate	0.112	- 0.096	- 0.142	0.033
14	Social Ties, Relationships, Group Work	0.108	0.057	- 0.017	***0.166**
15	Sense of Place and Privacy	- 0.042	0.134	0.009	0.088

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16	Water Quality	- 0.040	- 0.021	- 0.115	- 0.061

*Highlighted r-values reflect variables which returned significant results at an α-level of 5% (0.05**)**.

5. Discussion

The outcomes of the analysis in this study have confirmed the positions of literature on the influence of the socio-economic characteristics of health-seeking individuals on their health-seeking behaviours—particularly regarding their access to quality healthcare. The levels of enlightenment (formal education) and income are socio-economic factors determining people's choice of where to go for quality healthcare [91–93]. These factors determine health seekers' ability to secure health services in facilities they perceive to offer the best service. It is such that an individual by the level of enlightenment (educational qualification) might be aware of what quality health services are available and, at the same time, constrained by the economics to access the best services. This constraining influence portends a resort to alternatives and behavioural choices to meet health needs. Besides the role of fiscal requirements as a socio-economic decimal in quality healthcare acquisition, this study also reveals some psycho-social connections.

While it is easy to appreciate the socio-economic characteristics of quality healthcare acquisition/access, it is unclear how psycho-social features relate to accessing quality healthcare services [94]. The study results indicate that accommodation, privacy and homely environments are key psycho-social considerations for health services users in Port Harcourt. It further reveals that for individuals with socio-economic capabilities to access quality services, the need for a homely atmosphere determines their behavioural choices. Separately, they have established that psycho-social and socio-economic indices influence access to healthcare [95]. The correlation test connects both indexes as a co-joining influence on users' access to healthcare services. However, accommodation affects persons with higher educational qualifications. Therefore, users' levels of exposure influence their preferences for and expectations from a health facility. Observation shows that the clamour for decent accommodation does have a connection with their appeal for homeliness within health facilities, as earlier highlighted. Of interest is the correlation between a sense of safety plus status sleep quality and the income levels of healthcare-seeking individuals.

6. Conclusions

This study corroborates a perspective of literature indicating that socio-economic factors influence the consumption behaviour of health resort users. However, it is interesting to note that the findings from this study drive a new perspective beyond the individual fiscal capacity to purchase quality healthcare service, which is an interest in healthcare service in a homely environment. The health service users' interest seems to exceed the effectiveness of medical science in treating illness, the setting to receive medical care and other forms of healthcare. These psycho-social perspectives are not entirely new but seem neglected. However, given their complementary impact in providing quality healthcare service and the benefits of fostering population health, such environments should be cultured in our healthcare services. Achieving this would involve the collaborative action of various stakeholders ranging from the government, healthcare service providers, healthcare practitioners, built environment design professionals and the users of these services. This study is essentially a stimulus to engineer this process for a health resort facility in Port Harcourt, Nigeria, that aims to improve residents' health-related quality of life (HRQoL).

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Data Availability Statement: The datasets generated during the present study are available from the corresponding author upon reasonable request. The datasets are not publicly available owing to privacy or ethical restrictions.

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