The Mediating Role of Hospital Environment in The Relationship Between Service Quality And Customers Loyalty

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Abstract

This approach scrutinized the direct impirical relationship between service quality (SERVQUAL) dimensions and customer loyalty (CULY) in private hospitals in the Yemeni Capital (Sana'a) this study was conducted in five major hospitals, which are Almutawakel, Azal, Science & Technology, Modern German and Yemen German. Still, the paper determined the significance the hospital environment as an optimal mediator in the relationship between service quality and customer loyalty. Comprehension of hospital environment provides valuable insights into factors playing the critical role to increase the customer loyalty rates. In this thesis, empathy and assurance are posited as having an influence on customer loyalty rates in private hospitals in the Yemeni Capital. For data analysis and hypothesis testing, SEM tool and several statistical methods such as the maximum likelihood estimate and regression technique were utilized to understand the dimensionality of the variables. The outcomes demonstrated that service quality dimensions of empathy and assurance have positive influence on customer loyalty. Regression results also indicated that hospital environment have a positive influence on customer loyalty. Furthermore, hospital environment is found to be significant mediating factor in the relationship between empathy, assurance and customer loyalty in private hospitals in the Yemeni Capital. The relationship among hospital environment, service quality dimensions, and customer loyalty proposes that increasing the quality rate of service quality would be valuable to the management of private hospitals. Based on study findings, theoretical and practical implications were discussed. Limitations and recommendations for future research were also highlighted.

Keywords: service quality. Private hospital, hospital Environment, customer loyalty.

1. Introduction

To begin with, teams are the providers of health care and that teamwork are characterized by some sort of interaction between professionals working and aiming at a common goal and exhibit work interdependence, what urges them to share and develop understandings. This situation required the interest in social–psychological developments that function at the main care teams level. There are two terms correlating to significant processes regarding this level that are organizational culture and organizational climate. The measurement, definition and utility of this concept is a field of discussion, anyway, consideration of health service scholars in these meanings tied to these suggestions that they could be important elements in health care operation that would in turn be modified for improvement of the quality. Based on what mentioned, this paper attempts to define organizational climate conception as a team's common perceptions of the policies practices and procedures of the organization. In other word it can be seen as the manner in which the information should be shared. The optimal definition of organizational culture is that it represents 'a array of common

fundamental norms— conceived, revealed or developed by a particular group as it learns to manage with its issues of outer adaptation and inner incorporation. It is uncertain if culture and climate denote different notions. Measuring of climate (that are reliant on on awareness of definite behaviours) could mirror 'intermediate' level expressions of a 'deeper' organizational culture. Even though it is uncertain whether this difference has experimental backing. The association between the two concepts has more than theoretical impact. Criteria of both concepts are found to be related to results like team operation and morale, features of quality of health care and patient loyalty. This paper seeks to scrutinize this matter by using term of the hospital environment to discover The relationship between organizational climate, culture and customer loyalty through the interaction and communication.

2. PROBLEM STATEMENT

Many researches and studies in the past decades have focused on the development of new services, focusing on the design of services and the determination of their structural dimensions, while other focused on other topics that are associated with the tools and methods of providing these services and analyzing customer needs (Johne and Storey 1998). However, these researches did not give sufficient attention to improving the performance of workers and improving working environment conditions that form the basis for how the services should be delivered and how to gain customer loyalty, therefore, analyzing work environment conditions and examining the governing factors that must be ascertained become essential. (Edvardsson and gustavasson, 2003).

3. Research Questions

1. does assurance of service quality affects customer loyalty in Hospitals?
2. does empathy of service quality affects customer loyalty in Hospitals?

3. does mediating variable of hospital environment affects the relationship between services quality and customer loyalty?

4. Research Objectives

1. To investigate the effect of assurance of service quality on customer loyalty in Hospitals
2. To investigate the effect of empathy of service quality on customer loyalty in Hospitals
3. To investigate the effect of mediating variable of hospital environment and communication on the relationship between services quality and customer loyalty

5. Basic Research Method

To give a clear representation for the data to make decisions by inferential statistics, descriptive analysis was used in this study. It might represent the features of the data such as standard deviation, mean and frequency (Sekaran, 2000). In this research, descriptive analysis and standard deviation were applied to clarify the variables characteristics for (independent (IV), mediator (M), and dependent (DV)) under this study..
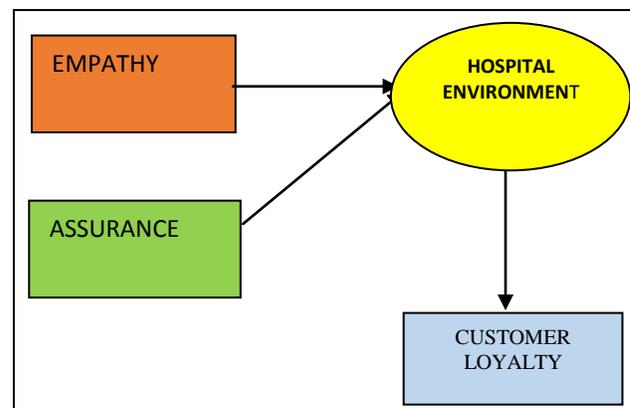
6. Conceptual Model

Figure 6.1: Conceptual Framework

7. The Hypothesis

1. H1- Empathy of Quality of Services significantly affects patient's customer loyalty.

2. H2- Assurance of Quality of Services significantly affects patient's customer loyalty

3. H3- Empathy of Quality of Services significantly affects patient's Hospital Environment

4. H4 Assurance of Quality of Services significantly affects patient's Hospital Environment

5. H5 Hospital Environment significantly affects patient's customer loyalty

8. Data Processing Methods and the Statistical Analysis

Hofmeyer (2007) mention that Data screening is necessary in ensuring that data are correctly entered, free from missing values, outliers and to confirm that the distribution of variables are normal. Appendix A depicts all the exogenous and endogenous variables together with their relative estimation errors in this study.

9. Hypotheses Testing – Correlation

In the structural model, the direct effects of Empathy (EMP), Assurance (ASU), as independent variables on Hospital Environment (HSEN) and Customer Loyalty (CULY) as dependent variables were examined (i.e., H1, H2, H3, H4, H5). The model also examined the direct effect of Hospital Environment (HSEN) on Customer Loyalty (CULY) (i.e., H11). An examination of goodness-of-fit indices indicates that the structural model adequately fitted the data: $\chi2 = 2898.432$, df = 2461, p-value = 0000, GFI = 0.816, AGFI = 0.803, CFI = 0.975, TLI = 0.974, IFI = 0.976, RMSEA =0.023 and $\chi2$/df= 1.178. The value of R2 for Hospital Environment (HSEN) and Customer Loyalty (CULY) was 0.23 and 0.29 respectively. This indicates, for example, the error variance of Customer Loyalty (CULY) is approximately 71 percent of the variance of Customer

Loyalty (CULY) itself. In other word, 29 percent of variations in Customer Loyalty (CULY) are explained by its three predictors (i.e., Empathy (EMP), Assurance (ASU) and Hospital Environment (HSEN)). Overall findings showed that the score of R² value satisfy the requirement for the 0.10 cut off value (Quaddus and Hofmeyer 2007). The coefficient parameters estimates are then examined to test the hypothesized direct effects of the variables. The path coefficients and the results of examining hypothesized direct effects are displayed in Table 9 1.

Table **Error! No text of specified style in document.**-1,
Examining Results of Hypothesized Direct Effects of the Constructs

Path	Unstandardized Estimate		Standardised Estimate	critical ratio n (c.r.)	P-value	Hypothesis Result
	Estimate	S.E.	Beta			
EMP→ HSEN	0.154	0.066	0.145*	2.354	0.019	H2) Supported
ASU → HSEN	0.149	0.067	0.132*	2.223	0.026	H3) Supported
EMP → CULY	0.203	0.053	0.235***	3.816	0.000	H7) Supported
ASU → CULY	0.13	0.053	0.142*	2.431	0.015	H8) Supported
HSEN → CULY	0.098	0.046	0.12*	2.103	0.035	H11) Supported

10. RESEARCH QUESTION FINDINGS

H1) Empathy (EMP) significantly affects Hospital Environment (HSEN)

In the proposed model, the researcher hypothesized that empathy has a positive effect on hospital environment (H2). The parameter estimate (H2: EMP □ HSEN; β = 0.145* CR-value = 2.354, p = 0.019) for the mentioned hypothesis is found both positive and staistiscally significant. Therefore, the result suggests that there is a positive effect of empathy on hospital environment. As such , this hypothesis was accepted. This study proposes that personnel ability to give the patient a personal attention and hospital's concern to the contact the patient's family have significant effect on hospital environment. In line with previous studies that support the result which the researcher concluded, authors (Hadwich et al, 2010) attained a conclusion that the service seeker-service provider relationship and the

interaction with supporting staff have a positive effect on customer perception. Administration conveyance happens amid the cooperation amongst staff and client. Amid the administration experience, client recognition depends on the experience's enthusiastic and impalpable components (Lemmink and Mattsson, 2002; Stauss and Mang, 1999). In this manner, staff states of mind and practices can impact client recognitions (Schneider and Bowen, 1985 In outline, the consequence of this speculation demonstrates that Empathy assumes a vital part in deciding the clinic condition observation and when the sympathy is up the healing facility condition goes up as needs be. Along these lines, it is critical for administration to upgrade the possibility of staff compassion to convey a fruitful social insurance in the doctor's facility.

H2) Assurance and Hospital Environment

In the proposed model, this researcher hypothesised that Assurance will have a positive effect on the Hospital Environment (H3). The parameter estimate results (H3: ASU □ HSEN; $\beta = 0.132*$, CR-value = 2.22

3, p = 0190) for the above hypothesis was statistically found significant. This hypothesis was therefore supported. This finding suggests that when assurance goes up it the the predicti of Honospital Environment goes up accordingly. This result is consistent with the results of previous research (Jabnoun and Chaker, 1993 these studies indicate that there is a significant positive relationship between assurance. In nutshell, this result indicates the important factors of assurance e.g. (patient's financial and personal information secrecy) determine the customers' perception of the hospital environment and indicates also the significance of it in the whole perception of service quality.

H3) Empathy and Customer Loyalty

In the proposed model, this researcher hypothesised Empathy will have a positive effect Customer Loyalty (H5). The parameter estimate results (H7: EMP □ CULY; $\beta = 0.235***$, CR-value = 3.816, p = . 0.000) for the above hypothesis was statistically found significant. This hypothesis was therefore supported. This finding suggests that the Empathy has influence on Customer Loyalty. Empathy is significant for customer satisfaction; this is result of study Yousapronpaiboon Khanchitpol C. Johnson

William, (2013). Aga and Safakli (2007) found that only empathy out of five dimensions of SERVQUAL was related to customer loyalty have the most significant influence on customer satisfaction. In summary, the result of this hypothesis are in agreement with the prior research indicating that Empathy plays an important function in determining and shaping Customer Loyalty.

H4) Assurance and Customer Loyalty

In the proposed model, this researcher hypothesised that Assurance has positive effect on Customer Loyalty (H4: ASU □ CULY; $\beta = 0.142*$, C.R. = 2.431, p= 0.015). Further, the standardized estimate of Beta was 0.142, indicating a positive relationship. It means, when Assurance (ASU) goes up by 1 standard deviation, Customer Loyalty (CULY) goes up by 0.142 standard deviations. The prior study the came up with the consistent conclusion was Mengi (2009) who reported that responsiveness and assurance are important drivers of customer satisfaction. Assurance, has the most significant associations with patients' willingness to use the facility again. Anbori et al, 2010).. while Shyh et al, (2011), see that assurance and satisfaction present a complementary effect on behavioral intentions. In summary, the result of this hypothesis indicated that is a driving force for enhancing the Customer Loyalty potentiality to the hospital.

H5) Hospital Environment (HSEN) mediates the relationship between Empathy (EMP) and Customer Loyalty (CULY)

In the proposed model, this researcher hypothesised that Hospital Environment (HSEN) will mediate the relationship between Empathy (EMP) and Customer Loyalty (CULY). the result showed that there was a significant relationship between Empathy (EMP) and Customer Loyalty (CULY) in the absence of Hospital Environment (HSEN), with the standardized total effect of 0.252 and the P-value of 0.001. Thus, the total effect of Empathy (EMP) as IV on Customer Loyalty (CULY) as DV without the inclusion of Hospital Environment (HSEN) as M was statistically significant at 0.01 level. This relation was still significant even after inclusion Hospital Environment (HSEN) into the model, with the standardized direct effect of 0.235 and the P-value of 0.001. Thus, the direct effect of Empathy (EMP) as IV on Customer Loyalty (CULY) as DV with the inclusion of

Hospital Environment (HSEN) as M was statistically significant at 0.01 level.

H6) Hospital Environment (HSEN) mediates the relationship between Assurance (ASU) and Customer Loyalty (CULY)

In the proposed model, this researcher hypothesised that leadership styles (Hospital Environment (HSEN) mediates the relationship between Assurance (ASU) and Customer Loyalty (CULY). the result showed that there was a significant relationship between Assurance (ASU) and Customer Loyalty (CULY) in the absence of Hospital Environment (HSEN), with the standardized total effect of 0.158 and the P-value of 0.003. Thus, the total effect of Assurance (ASU) as IV on Customer Loyalty (CULY) as DV without the inclusion of Hospital Environment (HSEN) as M was statistically significant at 0.01 level These results indicated that Hospital Environment (HSEN) mediates the relationship between Assurance (ASU) and Customer Loyalty (CULY). The degree of mediation was partial since the paths a' (direct effect) was found as statistically significant. The phenomenon supported the hypothesis H14. Ulrich, 1991).Concluded that one of the major problems for hospitals is the stress factor. Patient stress can grow due to the fear of treatment and the physical environment surrounding them. The stress factor can lead to anxiety. This can eventually translate into ignoring medication and having a bad health progress. Stress also extends to families, visitors and staff members. A good hospital can be evaluated based on its ability to reduce the stress of everyone in it. Lower levels of stress can then be translated into higher levels of patient satisfaction. Reducing the stress level of staff members also gives a high chance of increasing efficiency and loyalty. Making a positive patient wellbeing atmosphere inside an association must be refined through administrative duty, solid correspondence, committed hierarchical assets and common trust shared by authoritative individuals (Fleming, 2005; Singer et al., 2003).

12. SUGGESTED FUTURE RESEARCH

For future researches, it is recommended to use the government control as the mediating variable in the relationship between the service quality and customer loyalty. Additionally, the mediating role of job satisfaction impact on the relationship between service quality and customer loyalty. It is recommended to shed light on the impact of the medical service marketing as mediator on the relationship between service quality and customer loyalty. Further, it is recommended to investigate the mediating role between the transformational leadership impact on the service quality and customer loyalty as well aas the mediating role of the high committee of medical specializations and its impact on service quality and customer loyalty. Finally, it is recommended to to imply the same dimensions in this study to investigate the public hospital and in other countries by comparing the service quality provided in these various countries.

13. CONCLUSION OF THE RESEARCH

The expanding significance of cost control, changing purchaser states of mind combined with extreme rivalry will influence a large number of the fruitful clinics should put themselves as "brilliant" medicinal services suppliers. Indeed these healing centers that don't search for a superb position will think that it is important to characterize, screen, and enhance the nature of the administrations they give. Specialized quality alone, nonetheless, won't prompt expanded incomes and office usage along these lines it is important to think about utilitarian quality too. Estimating quiet fulfillment, says Webster (Guagagnino, 2003), fortifies a quality ethos by alarming patients that healing facility staff are responsible. It demonstrates healing facility staff that patients are satisfied with benefit quality. From beginning, patients went to doctor's facility since treatment costs are low as well as in light of the fact that treatment is high caliber. Individuals from low and high financial strata don't falter to utilize the stablishment's administrations. Revising microbiology benefit disappointment, talked about in this examination, enhances the establishment's distinction. Significance progressively is being joined to customary overseer capacities, however today, clinics are perceived as social organizations. In this changed condition, patients turn into a point of convergence (Sreenivas and Prasad, 2003). Consequently, doctor's facility staff must make progress toward most extreme patient fulfillment

and give quiet situated administrations. Fulfillment gives The patient certainty to confront his/her medicinal issues. It is the healing facility executives' duty, along these lines, to keep patients and their chaperons fulfilled. An enhanced patient wellbeing atmosphere can prompt better results. Research recommends that an enhanced wellbeing atmosphere supports blunder and issue discourses; then again, a poor security atmosphere makes issues be concealed and not openly talked about (Hofmann and Stetzer, 1998; Frese and van Dyck, 1996; Edmondson, 1996 Negative security atmospheres dissuade people from acting suitably and guaranteeing security (Dobbins and Russell, 1986; Hofmann and Stetzer, 1998). Therapeutic terms utilized by specialists. Staff can be requested to utilize plain and basic dialect. He or she should attempt and see whether the patient has comprehended. In the event that the specialists are exhausted then direction materials can be put outside the rooms to clarify the nature and the requirement for tests. Toilets and surroundings are not perfect. This is an effectively rectifiable issue. Specialists should check and oversee staff cleaning and keeping up the toilets. In the event that workers don't consent then obligation regarding keeping up tidiness the healing facility can contract with privately owned businesses so it winds up less demanding to check execution. The lab test accumulation region and its environment ought to be perfect and have legitimate seating for patients, which ought to be agreeable. An expansive TV screen indicating programs like family arranging, cleanliness, preventive therapeutic care, AIDS and different irresistible sicknesses. Since the patients are wiped out, instruction and amusement projects can incorporate recreational exercises, which help to diminish pressure (Posen, 1995). Movies about the healing center and its administrations and accomplishments can be appeared, which makes a superior clinic picture. Usage and observing can uncover positive criticism and help to recognize territories that worry patients alongside assessing their fulfillment scores. This is the most ideal approach to recognize insufficiencies and enhance healing center administrations. Informal exchange can cost healing centers $6,000-$400,000 in lost incomes more than one patient's lifetime (Strasser et al., 1995). The cost of drawing in new clients is roughly five times that of keeping current clients glad (Clancy and Schulman,

1994); and proposal given by companions and relatives conveys more weight (Yucelt, 1994). The patient qualities were all the more ground-breaking indicators of fulfillment perhaps because of their relationship with desires.The quality can be improved by addressing specific issues such as providing adequate information regarding their illness, facilities available in the hospital and general instructions by the hospital management and healthcare staff while understanding the expectations of their patients.What makes one hospital different from others? How does a hospital stand out from its competitors? Instead of trying to be "everything", the customer will know what this particular hospital is and the stand its organisation takes.Patients seldom tell an organisation of its differences from its competitors.

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