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## Article

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# The Patient Experiential Quality Model Scale Development and Validation

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## Abstract

Patient Experiential Quality is an important dimension in the quality of care in hospitals because poor quality cause visible and invisible cost. The aim of this paper is first to identify the dimensions of patient experiential quality, second to examine the interrelationships among patient experiential quality, patient satisfaction, patient trust, revisit intention, and word of mouth, and third to examine the scale's ability to forecast experiential quality outcomes. The data are collected from mix method study and three different field studies of healthcare patients in two different health care contexts, namely maternity and paediatric clinics. Patient experiential quality is found to conform to the structure of the hierarchical model in all three phases. This study identifies five primary dimensions, perceived service quality, interpersonal quality, technical quality, environment quality and administrative quality, which in turn are found to drive experiential quality perceptions. The findings also support that patient experiential quality has a significant impact on revisit intention and word of mouth and that experiential quality mediates the relationship between patient satisfaction and trust. In addition, the results indicate that outcome quality is identified as the most primary dimension of patient experiential quality perceived by maternity and paediatric clinics.

## Keywords

Patient experiential quality, Patient satisfaction, Patient trust, Patient loyalty

## JEL Classification

A10

## Introduction

The COVID-19 pandemic has opened the big picture that health services have many vulnerabilities (Hosseini et al. 2020 & Mohammed et al. 2021). All over the world, including Indonesia, hospitals are experiencing a change in a situation where the number of visits for COVID-19 patients has increased, while non-COVID patients have decreased dramatically. The impact of this situation requires hospitals to rearrange their resources so that idle capacity in non-COVID-19 service areas can be utilized to fill the shortcomings that occur in service areas for COVID-19 patients. This resource mobilization has an impact on increasing specific needs to provide COVID services in a larger capacity, including the need for human resources, medical devices, personal protective equipment, to infrastructure in the form of treatment rooms that must be specially designed. All of this has significant financial consequences, especially if a hospital relies on income from non-COVID patients whose numbers have decreased significantly. The consequences of this situation can affect the hospital's ability to provide safe and quality services for patients.

The health service quality in hospitals can be understood by evaluating the performance of hospital services from the patient's perspective. There are many models for assessing hospital services, one of which is by measuring patient experience. Patient experience is a key component of quality of care (Larson et al. 2019, Saunders et al. 2016, Etingen et al. 2016 & Zgierska et al. 2014) and an important outcome of medical care (Golda et al. 2018, Junewicz & Youngner, 2014). Stakeholders around the world are progressively concerned in collecting patient experience data to assess service suppliers against various indicators of performances and to encourage improvements in the quality of healthcare services. In addition, technological developments also encourage

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innovative and efficient approaches to measuring patient experience. An experience is a personal event that occurs in response to some stimulus. The experience involves all aspects of every life event. In other words, marketers must set the right environment for customers; in this context are patients, and what they want. Through the right experience given, it can make the patient feel a sensation or thing that is different from other similar services. This positive experience has a big influence on the emergence of patient satisfaction.

Patient satisfaction and experience are the terms that are frequently used interchangeably. Essentially, both have different concepts. To measure the experience of a patient, it is required that we figure out what the patient's obtains in a healthcare setting (for instance clear communication with a health worker) happens or how often it does. In contrast, satisfaction is related to whether the patient's expectations about health encounters are met. If there are two patients receiving the exact same treatment, their expectations towards how health care should be delivered may be different. Hence, these differences can affect dissimilar satisfaction ratings. Patient satisfaction is the more general measure, which tends to include patient groups. For example, patient satisfaction survey software can provide an overview of how satisfied patients are with various health care facilities and settings. Patient experience is a personalized measure, specific to the individual patient. This includes providing individuals with patient feedback software so that they can provide anonymous feedback. This can help in paying attention to understanding what type of treatment the patient is seeking on a personal level. Patient satisfaction refers to the feedback obtained on different technical aspects of the health service only. Simple things like the temperature of the food or clean sheets can increase patient satisfaction. But these factors, while important, are not always very critical or absolute. Patient experience is a broad term that includes various items under its scope. It is more of a holistic measure, considering various non-technical factors that affect healthcare services. This includes optimizing various aspects of patient interactions, from communication, hospital environment and safety to delivering high-quality care.

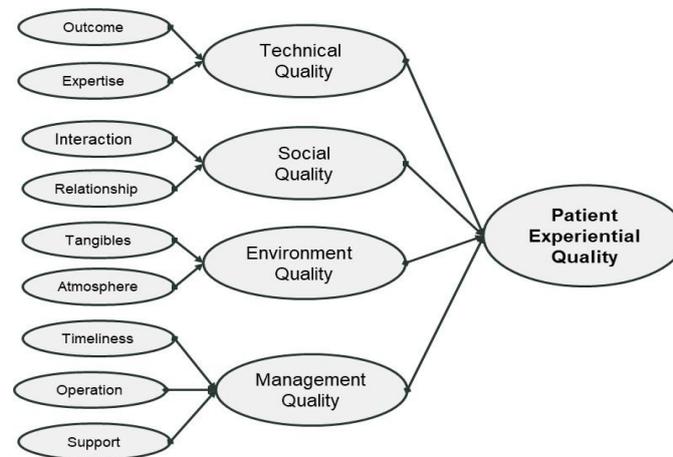
## Literature Review

Patient satisfaction is an important factor that is often used as an indicator to assess the quality of health services (Ng & Luk, 2019, Boyer et al., 2006). Satisfaction can be defined as a feeling of pleasure that performs as a meeting point between expectations for service and service performance perceived by consumers. In addition to satisfaction, patient trust is also one of the expected impacts of hospital services. Patient trust according to several studies, Chang (2013); Jiang (2019), and Hong & Oh (2020), consists of loyalty, competence, honesty, and confidentiality. High patient trust shows they have loyalty to hospital services and believes the hospital has honesty and guarantees to maintain patient confidentiality and has the competence to improve and improve the patient's health status.

Patient experience of the quality of service has an effect on the satisfaction and trust of the patient, and this has a role in affecting loyalty shaping trustworthiness. Consumer loyalty is defined as a consumer's assurance to repurchase or re-patronize a favoured product or service constantly in the future, leading to buying of the same product or set of brands, despite potential situational influences and marketing efforts causing switching behaviour (Oliver, 1999). Loyalty covers four phases including cognitive, affective, conative, and motoric or action. Conative loyalty also called behavioural intention implies a brand-specific commitment to repurchase. Health care providers have several types of customers, namely doctors, patients, families, etc., patients are the basis of loyalty from other constituents (Fisk et al., 1990). Loyal patients are more likely to return to the same healthcare provider, spread positive word of mouth and recommend that services to others (Chia-Even et al. 2013). Based on the elaboration above, this study is aimed at providing a conceptualization of patient experiential quality construct that involves the area of the construct, thoroughly developing a scale to measure patient experiential quality from the patient's perspective of customers and examining the effects of this conceptualization of patient experiential quality on patient satisfaction, patient trust and patient loyalty.

Management quality facilitates the core services production while giving additional value to the service (Usman et al. 2018, used by the customers (Dagger et al., 2007, McDougall & Levesque, 1994, Usman et al., 2018). Service facilitation is essential for the distribution and consumption of central services while giving backup to the elements added to services but are not required for core service delivery (Lovelock, et al. 2001). Three themes of customer's perceptions of administrative quality include timeliness or punctuality, operations, and support. First, timeliness means factors that are involved in the arrangement to receive medical services, such as waiting lists, waiting times, ease of altering schedules, and hours of surgery (Ko et al., 2019, Dagger & Sweeney, 2007; Ko et al., 2019; Thomas, et al. 1997). Focus Group Discussion (FGD) participants often mentioned the punctuality of service, as illustrated by the comments "I need to wait for two and half hour" and "You can get an appointment when you need it." The second theme is operational in the form of facilitating the production of core services through general clinical management, include administration, coordination, organization, and integration of medical care. Group discussion participants often referred to aspects of operational services, as indicated by the following comments: "The clinical administration could have been better managed" and "The coordination of various services in medicine by the clinic was remarkable." The ultimate dimension, support, signifies an additional service component that improves value to primary services (Lovelock, et al. 2001, Grönroos 1990). This exploratory research recognized support as an

imperative feature of the service, as echoed in the mention “They offer valuable support activities that are open to all patients and family”.



**Figure 1** Patient Experiential Quality Model.

Environmental quality is defined as a multifaceted mix of environmental factors that form consumer service insights (De Regge et al.2018, Dagger et al.2007, Gotlieb, et al. 1994). Atmosphere and tangibles are the main themes that trigger customer perceptions of environmental quality. The first theme of atmosphere refers to the insubstantial contextual features of the service environment. These foundations are generally below the level of consumer awareness, thus affecting environmental comfort. Throughout the exploratory research, participants easily deliberated the atmosphere in the clinic, as specified by the comments “The clinic atmosphere is pleasant and comfortable” and the clinic “does not have’a hospital smell” The second environmental quality, tangibles, refers to the physical elements of the service environment that are at the forefront of consciousness. In the present research, tangibles consist of the design, function, or layout of the environment and the signs and symbols found in the surrounding environment. Comments in the FGDs such as “I think the whole clinic layout has been very well thought out” and “The colours of the clinic don't make it look sterile, but still look clean” emphasize the significance of concrete features in environmental quality.

Social quality reflects the interactions and relationships that develop and influence service providers and users (Brady and Cronin 2001, Grönroos 1984). Three main themes were found to shape customer perceptions of social quality; namely: manner or behaviour, communication or communication, and relationship or relationships. The first, behaviour, describes the attitudes and behaviour of service providers in service settings. The way service providers interact with customers is a mutual topic of discussion throughout focus group discussions, as demonstrated by the comments as follows: “The clinic staff is supportive” and “they care, and they empathize.” The second theme, communication, reflects the interactive nature of the interpersonal process. Communication comprises the transmission of information between the provider and the customer, the level of interface, and the level of two-way communication. Focus group discussion participants often cited communication as a significant display of social quality, as suggested by the following comments: “staff annotations: “They have decent communication skills” and “they listen to what you have to say.” The third theme, relationship, refers to the intimacy and strength of the rapport established between the worker and the client. Relationships include a high degree of mutuality and close and ongoing interpersonal interfaces in which belief or mutual liking exists. Discussion groups reciprocal fondness occurs. FGD participants signposted that they have developed close bonds, friendships, and reciprocity with service workers, as indicated by the comments “they are a very important part and we become like family.”

Technical quality is related to the technical competence or technical competence of service providers and service outcomes achieved (De Regge et al.2018, Dagger et al.2007, McDougall & Levesque 1994). Two core themes underpin customer perceptions of technical quality they are expertise and results. The researcher believes that these themes are prominent gauges of practical eminence in the setting of this study, where the delivery of health services is complex and continuous in nature. That is, the customer evaluates the technical quality based on the expertise of the service worker and the results achieved through various service meetings. The first theme, expertise, reveals the worker's capability, knowledge, experiences, or skills (Aharony & Strasser, 1993). Expertise reflects the service provider's ability to adhere to high service delivery standards (Zifko-Baliga & Krampf, 1997). FGD participants referred to issues such as capability and knowledge as indicators of proficiency. Examples of comments about service providers are, the staff had clearly competent, and Their knowledge and skills are proven. The second theme of service outcomes refers to the outcomes of the service process, or what consumers receive as a result of their interactions with service companies (Aharony & Strasser 1993, Grönroos, 1984). Comments

such as “The outcome measure is if the treatment goes according to plan” and “patient feel better because they come to the clinic, they are more positive” are proof of the significance of result as a practical feature of service quality. However, the researcher noted that outcomes did not refer to the final outcome, like healing) but rather to results experienced during a sequence of service encounters.

## Materials and Methods

Malang is a metropolitan area located in East Java, Indonesia which includes Malang City, Batu City and Malang Regency. The region has a total population of 3,642,007, according to the 2017 census. This region has a total area 3,882.44 km<sup>2</sup> with population density 938 people per km<sup>2</sup>. Malang is known as home to several well-known universities in Indonesia, and its satellite area, Batu is famous as a tourism center in East Java which is usually called Kota Wisata Batu or Batu Tourism City. The climate of parts of Malang with an altitude of more than 1000 meters above sea level is classified as highland subtropical. This causes the climate of Greater Malang to be cooler than other areas in Indonesia. In the midyear, in the mountainous area of Malang Raya, which has an altitude of more than 2000 meters above sea level, there is a dry winter in the form of frost, which means that the temperature is always below zero Celsius from late at night until early in the morning. This region is well known for its mild climate. During Dutch colonization, it was a popular destination for European residents. Even now, Malang still holds its position as a popular destination for international tourist

This study administered mix method, with sequential exploratory or exploratory mixed methods design, this design includes two phases, and they are qualitative and quantitative study. The qualitative study was employed through content analysis and focus group discussion with 28 health professions in Malang Region. The quantitative study was conducted by using explanatory factor analysis and confirmatory factor analysis, with structural equation modelling, data from 153 patients from maternity & paediatric clinic at Malang region. Model fit will be evaluated using CFI, IFI, NFI, TLI, and RSMEA based on suitability criteria as was done in previous research. Each item will test in the same model and is limited to loading each factor.

The qualitative data in the present study were gained from three focus group discussions which was undertaken with healthcare professionals. They were 28 participants involved in the qualitative study, which include doctors, nurses, and midwives. To identify patient experiential quality, research problems were formulated as follows: 1) According to your point of view, what makes a great clinic? 2) What would be the major assets and weaknesses of a clinic? and 3) Would you tell me about any positive or negative experiences you have had at the clinic? In this discussion, participants responses were recorded and transcribed, and the data were analysed using content analysis. After conducting content analysis 9 (nine) dimensions & 45 (forty-five) sub-dimensions were found. They are atmosphere, expertise, interaction, relationship, operation, outcome, tangible, and timeliness.

A repeated theme during the qualitative research was that assessments of patient experience are multifaceted, happening at numerous stages of abstraction. Participants continually gave responses about service-level about maternity and paediatric service aspects and overall perceptions of health quality. Besides, provision for the four principal dimensions of social quality, technical quality, environmental quality, and administrative quality was found and the multifarious structure of each of these primary dimensions embracing at least two sub-dimensions was identified. While the improvement of the sub-dimensions was based on the themes recognized in the qualitative research, the previous studies give supports to support our findings (Wu et al. 2016, Kitapchi et al. 2014, Brady & Cronin 2001; Parasuraman, Zeithaml, and Berry 1985). Therefore, the sub-dimensions that were identified and the supporting literature are discussed in the study. The sub-dimensions are clustered based on the main area they reflect to support this discussion.

## Results and Discussions

### *Qualitative Finding*

The findings of qualitative analysis, using content analysis, found that there were 9 dimensions and 45 sub-dimensions, they are atmosphere, expertise, interaction, relationship, operation, outcome, tangible and timeliness. For the atmosphere dimension consists of the atmosphere at the clinic is agreeable, patient likes the feel of the atmosphere at the clinic, the temperature at the clinic is pleasant, the clinic has an appealing atmosphere, and the clinic smells pleasant. The dimension of expertise consists of sub dimensions: patient can trust the staff at the clinic to be well skilled and capable, they believe that the staff at the clinic are highly trained at their occupations, the staff at the clinic bring their responsibilities proficiently and patient feels good about the value of the care given to me at the clinic. The interaction dimension in the content analysis found that there are: the staff at the clinic are concerned about patient well-being, staff at the clinic explain things in a way that patient can understand, patient feels the staff at the clinic understand their needs, staff at the clinic are willing to answer their questions, patient always gets initialled consideration from the staff at the clinic, staff at the clinic always listen to what patient have to say, the clinic's staff treat patient as an individual and not just a number, patient believes the staff at the clinic are concerned about them, and patient finds it easy to discuss things with the staff at the clinic.

The dimensions of preparation, consist of the clinic's opening hours meet patient's needs, the clinic's records and documentation are error free, like billing, etc., the clinic works well with other service providers (e.g., pathology), patient believes the clinic is well-managed, the registration procedures at the clinic are efficient and the discharge procedures at the clinic are efficient. Next, outcome dimensions, they are: patient feels expectant as a effect of obtaining treatment at the clinic, patient believe receiving treatment at the clinic has been meaningful, patient believes their forthcoming health will be better as a result of visiting the clinic, patient leave the clinic feeling encouraged about their treatment, coming to the clinic has increased patient chances of improving their health, patient believe the results of their treatment will be the best they can be. The relationship dimensions include patient have built a close relationship with some of the staff at the clinic, the staff and patient discuss the things that are taking place in their lives, and not just about their medical state, the staff and patient sometimes kid around, laugh, or joke with each other like close friends. The dimensions of support consist of the clinic frequently runs support groups and programs for patients; the clinic gives patients the services beyond medical treatment. And the clinic provides patients with an outstanding variety of support services. The tangible dimensions involve the comfortable furniture, the layout of the clinic that the patients like, the attractive clinic, the interior decoration that patient likes, e.g. style of furniture, the patient-friendly design of the clinic, the appropriate lighting, and the colourattractive color scheme at the clinic. And finally, the timeliness implicates the clinic keeps waiting time to a slightest and commonly, appointments at the clinic run punctually.

**Table 1.** Validity, Reliability and Measurement of the Patient Experiential Quality Scale.

	EFA Loadings	EFA Cronbach's $\alpha$	CFA Loadings
Atmosphere	.55 to .81	.94	.95
Expertise	.59 to .88	.96	.84
Interaction	.44 to .82	.82	.95
Operation	.63 to .94	.89	.95
Outcome	.68 to .94	.95	.85
Relationship	.54 to .74	.93	.94
Support	.50 to .71	.94	.94
Tangibles	.88 to .91	.93	.92
Timeliness	.41 to .65	.92	.94
Social quality	.88 to .95	.92	.90
Technical quality	.91 to .98	.95	.94
Environment quality	.88 to .95	.92	.92
Management quality	.89 to .97	.94	.92
Patient Experiential Quality (PEQ)	.93 to .94	.95	.93
Patient Satisfaction (PS)	.95 to .96	.96	.96
Patient Trust (PT)	.89 to .95	.94	.92
Patient Loyalty (PL)	.80 to .93	.95	.95

### **Quantitative Finding**

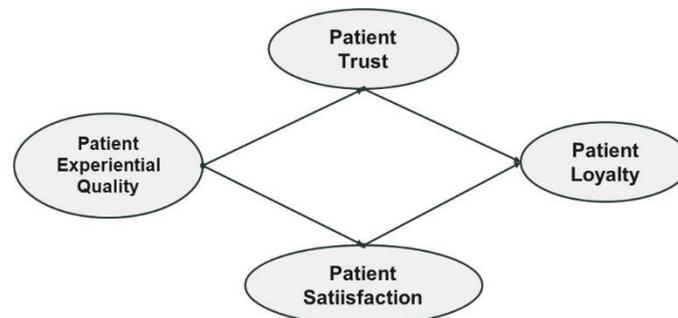
The results obtained offer a new conceptualization of patient experience and a trustworthy and valid scale to measure patient experiential quality from the viewpoint of the customer. In this section, we observe the experience quality scale in envisaging significant health service outcomes, namely, patient satisfaction, trust, and loyalty. We selected these results according to the weight of research suggesting their significance as outcomes upshots of experiential quality (Brady & Robertson 2001, Cronin, Brady & Hult 2000, Bitner & Hubbert, 1994).

Perceived service quality (Brady & Cronin, 2001, Parasuraman, Zeithaml, & Berry, 1988) implicates four indicators. They are the whole quality of the service delivered by the clinic is outstanding, the quality of the service delivered at the clinic is remarkable, patient considers that the clinic offers a service that is greater in every single way, and the service provided by the clinic is of a high standard. Patient Satisfaction (Oliver 1997, Hubbert 1995, Greenfield & Attkisson; 1989) contains five indicators. They are patient's feelings towards the clinic are very optimistic, patient feels good about visiting the clinic for the treatment, overall patient is pleased with the clinic and the service it provides, they feel satisfied that the results of their treatment are the best that can be achieved and the extent to which patient's treatment has produced the best possible outcome is sustaining. Patient Trust (Alrubaiee, 2011, Hall et al., 2002, Kao et al., 1998, Safran et al., 1998, Anderson & Dedrick 1990) implicate six indicators. They are patient trusts their clinic will put health and well-being above keeping down the health plan's costs, they trust their clinic will keep personally delicate medical information private, they trust their clinic will provide them with

information on all possible medical alternatives and not just choices covered by the health plan, they trusts their clinic will refer them to a specialist when needed, they trusts their clinic will make proper medical resolutions regardless of health plan rules and guidelines, and patient trust their clinic will perform necessary medical tests and procedures regardless of cost. Patient loyalty (Zeithaml, Berry & Parasuraman, 1996, Taylor & Baker 1994, Headley and Miller 1993) entail seven indicators. They are If patient had to begin treatment again they would want to come to this clinic, patient would highly recommend the clinic to other patients, patient intend to continue having treatment, or any follow-up care they need, at this clinic, they are glad they have their treatment at this clinic rather than somewhere else, patient intends to follow the medical guidance given to them at the clinic, they have said constructive things about the clinic to their family and friends, and patient have no intention to alter clinics.

Additionally, we inspected if general patient experiential quality arbitrated the association between the primary dimensions of our model and patient loyalty. The results presented thus far propose a new conceptualization of health care service quality and a dependable and valid scale to measure patient experiential quality from the customer's point of view. We examine our patient experiential quality scale in predicting important health service outcomes, including, patient satisfaction, trust, and loyalty. We chose these outcomes based on the weight of research signifying their significance as results of experiential quality (Hong & Oh 2019, Brady & Robertson 2001, Cronin, Brady, Hult 2000, Hagar et al. 2018, Wu et al. 2016, Kitapchi et al. 2014). Moreover, we observed if overall patient experiential quality mediated the relationship between the primary dimensions of our model and patient loyalty.

Our primary dimensions contain four primary and 12 sub-dimensions adopted from Dagger et al. (2007), Brady and Cronin (2001), Rust and Oliver (1994), McDougall and Levesque (1994). They are social quality, environment quality, management quality, and technical quality. We also purpose four antecedences variables adopted from Greenfield and Attkisson (1989), Hubbert (1995), Oliver (1997), Anderson & Dedrick (1990), Safran (1998), Kao et al. (1998), Harrison-walker (2001), Hall et al. (2002), Alrubaiee & Alkaa'ida (2011), Wu et al. (2016). They are patient satisfaction, patient loyalty, and patient trust. The result of explanatory and confirmatory factor analysis using Structural Equation Modeling shows loadings factor between 0.41 to 0.94 (for sub-dimensions), 0.88 to 0.98(for primary dimensions), 0.80 to 0.94 (for antecedences).



**Figure 2** Conceptual Model.

The results presented thus far offer a new conceptualization of patient experience and a reliable and valid scale to measure patient experiential quality from the customer's viewpoint. We examine our patient experiential quality scale in predicting significant health service outcomes, including patient satisfaction, trust, and loyalty. The results presented thus far offer a new conceptualization of patient experience and a reliable and valid scale to measure patient experiential quality from the customer's perspective. We examine our patient experiential quality scale in predicting important health service outcomes, including, patient satisfaction, trust, and loyalty. We selected these outcomes based on the weight of research suggesting their significance as outcomes of experiential quality (Hong & Oh 2019, Hagar et al. 2018, Wu et al. 2016, Kitapchi et al. 2014, Brady & Robertson 2001, Cronin, Brady and Hult 2000; Brady and Robertson,2001; Kitapchi et al.,2014; Wu et al., 2016; Hagar et al., 2018; Hong & Oh, 2019). Furthermore, we examined whether overall patient experiential quality mediated the relationship between the primary dimensions of our model and patient loyalty.

Table 2 shows that the research model has a good fit with the data. The exploratory sample has values of  $\chi^2$ , df, CFI, TLI, and RMSEA = 3,820.91, 542, 0.91, 0.90, and 0.09, while the confirmatory samples are = 1,839.30, 542, 0.93, 0.91, and 0.08. Testing the parameters of the rift model shows that social, technical, environmental and management qualities each have a positive and significant effect on the quality of patient variables both in exploratory and confirmation studies. The technical quality for sample exploration and confirmation respectively has a  $\beta$  value of 0.53 and 0.25, management quality has a  $\beta$  value of 0.29 and 0.39, both of which can be said to have the greatest effect on the quality of patient experience. While social quality has a  $\beta$  value of 0.18 and 0.30, and environmental quality has a  $\beta$  value of 0.09 and 0.12 both of which have a lower level of significance effect.

**Table 2.** Patient Experiential Quality Scale Structural Model Estimates.

	Exploratory Sample		Confirmatory Sample				
	Path Estimate	t	Path Estimate	t			
PEQ → PS	0.85	32.07	0.5		10		
PEQ → PL	0.7	17.24	0.37		10.35		
PS → PL	0.25	6.4	0.62		16.49		
Technical quality → PEQ	0.53	20.5	0.25		7.35		
Management quality → PEQ	0.29	11.79	0.39		8.97		
Social quality → PEQ	0.18	6.76	0.3		6.83		
Environment quality → PEQ	0.09	3.99	0.12		3.17		
Outcome → Technical quality	0.02	0.58	0.27		3.76		
Expertise → Technical quality	0.84	22.56	0.43		5.81		
Operation → Management quality	0.67	21.97	0.63		12.36		
Timeliness → Management quality	0.22	7.51	0.24		5.4		
Support → Management quality	0.1	3.07	0.14		3.46		
Interaction → Social quality	0.72	20.84	0.84		20.6		
Relationship → Social quality	0.28	8.06	0.19		4.91		
Tangibles → Environment quality	0.76	24.24	0.63		15.12		
Atmosphere → Environment quality	0.25	8.25	0.36		8.97		
Goodness-of-fit indices	$\chi^2$	df	CFI	IFI	NFI	TLI	RMSEA
Exploratory sample	3820.91	542	0.91	0.91	0.9	0.9	0.09
Confirmatory sample	1839.3	542	0.93	0.93	0.9	0.91	0.08

**Note:** CFI = comparative fit index; IFI = incremental fit index; NFI = normed fit index; TLI = Tucker-Lewis index; RMSEA = root mean square error approximation.

a. These are standardized loading estimates.

b. Based on one-tailed tests; t values greater than 1.65 were significant at  $p < .05$ ; t values greater than 2.33 were significant at  $p < .01$ .

The findings of our study suggest that patient experiential quality is an important determinant of patient satisfaction, trust, and loyalty, thus emphasizing the importance of patient experience as a decision-making variable. The strong connection between patient experience quality and loyalty is significant because satisfaction is generally viewed as more closely aligned with behavioural intentions, in that satisfaction and trust is typically modelled as mediating the relationship between quality and loyalty (Kitapchi et al. 2014, Chang et al.2013, Moliner2009, Brady 2002). The results of our study also generally sustained the mediating role of quality in the service attributes satisfaction, trust, and loyalty relationship. This mediation mechanism implies that the service attributes are more strongly related to quality than loyalty and that customers' overall perceptions of service quality continue to play an important role in generating consumer outcomes. Although this mediation effect has been identified by prior researchers (Wu et al. 2016, Huppertz & Carlson 2010, Brady & Baker 2002), our findings underscore the strength of this effect in a different service context and using different service quality dimensions. We note, however, that we found only partial mediation in the general practice sample. These findings suggest that healthcare managers and indeed managers of other non-health services, like financial, education services, etc, should consider experiential quality, satisfaction, trust, and loyalty as important strategic objectives because these constructs provide a way for managers to ensure positive word of mouth in their cohort. These findings are expected to be of relevance to high contact, involvement, ongoing services in which service provision is likely, as in this study, to have a significant impact on long-term behaviour. Services such as physiotherapy and counselling as well as non-health services such as education and finance services may benefit from these findings.

The findings in this study indicate that the patient's experience of quality is an important factor that affect patient satisfaction, trust, and loyalty, so it is very important to emphasize the importance of patient experience of service quality as an important variable in management decision making. A significant relationship between patient experience on quality and loyalty is positive because satisfaction is generally seen to be more aligned with behavioural intentions, where patient's satisfaction and trust usually are modelled as mediating the relationship between experience on quality and loyalty (Brady2002, Chang et al.2013, Kitapchi et al.2014, and Moliner2009). The results of this study in general also support the mediating role of patient satisfaction and trust in relationships experience of service quality with patient loyalty. This mediating mechanism implies that service attributes are more strongly related to quality than loyalty and that customers' perceptions of service quality continue to play an

important role in delivering quality service to consumers. Although this mediating effect has been identified by previous researchers (Wu et al. 2016, Huppertz & Carlson 2010, Brady & Baker 2002). The findings of this study underscore the strength of this effect in different service contexts and using the experiential dimension of different quality of service. The findings of this study also indicate that managers of health services, as well as managers of other non-health services, such as finance, education services, etc., must consider the experience of service quality, satisfaction, trust, and loyalty as important strategic goals because this construction provides a way for managers to ensure the creation of quality and sustainable service quality for their consumers. These findings are expected to be of relevance for high contact, engagement, ongoing services where service provision is possible, as in this study, had a significant impact on long-term behaviour. Health services such as anaesthesiology, surgery, orthopaedic, obstetrics, paediatric, dermatology, cardiology, ophthalmology pulmonology, neurology, otorhinolaryngology, physical medicine, microbiology, pathology, radiology, urology and internal medicine and non-health services such as education and financial services could benefit from these findings.

## Conclusion

Like other studies, this study also has some limitations. One of them is a cross-sectional design where the weakness of this design is that measurements are obtained simultaneously. So, the researcher identified that research with a longitudinal design is needed to support finding the basic relationship between constructions over a wider period. Although the sampling method used in this study took a census of customers from paediatric and maternity clinics, it is a limited representation of the maternity and paediatric clientele population. In addition, the online survey method resulted in some non-response from customers, although this is quite low compared to other studies conducted offline. This research was also conducted in one service industry (health care) and in one region. However, the researcher applies two different health care contexts, namely paediatric and maternity care, so that in the future generalizations are needed for other healthcare contexts for example, emergency, medical-surgical, psychiatry, community care, and in non-health contexts such as education, finance, food, and beverage services will further increase confidence in building research models. The findings of this study also recommend some significant directions for future studies. The defined model can be used for longitudinal studies to examine how customers' perceptions and evaluations of the quality of the experience change over time.

In conclusion, the patient experiential quality instrument defined in this study can be implemented to monitor and develop the quality of services provided to healthcare customers. Although developed only in the context of paediatric and maternity clinics, this instrument may be of interest to a wide range of service providers who offer high-involvement, high-contact and ongoing services. The quality of patient experience consists of nine dimensions and forty-five sub-dimensions. These dimensions are atmosphere, expertise, interaction, operations, results, relationships, support, realism, and timeliness. Furthermore, the patient experiential quality also consists of four main dimensions, namely environmental quality, management quality, social quality, and technical quality. The relationship between patient experiential quality has a relationship with customer loyalty, which is mediated by trust and patient satisfaction as intervening variables. The patient experiential quality instrument developed in this study can be used to monitor and improve the quality of services provided to health care customers. Although developed in the context of paediatric and maternity clinics, this instrument may be of interest to a wide range of service providers offering high-involvement and sustainable contact services. The results of this study provide insight for managers to understand the dimensions that reflect the patient's experience of service quality, especially health services. This study can also be used to improve quality, which is significant because of the effect of patient experiential quality of health services on patient satisfaction, trust and loyalty, and in broad contexts such as the quality of life experienced by patients themselves.

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