# What Role Does Patient Gratitude Play in the Relationship Between Relationship Quality and Patient Loyalty?

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#### Abstract

The environment in health care organizations is becoming increasingly competitive. Therefore, to improve patient return rates, health care organizations need to examine how to enhance the physician-patient relationship. In particular, the role of patient gratitude on the physician-patient relationship in health care organizations is still ambiguous. The specific role of patient gratitude in the medical service industry needs to be identified. Therefore, this study aimed to investigate physician-patient interactions with reference to relationship marketing and to further understand the relationships among relationship quality, patient gratitude, and patient loyalty. The potential effects of patient gratitude on the physician-patient relationship were examined by testing mediation effect. The results demonstrated that patient gratitude had a notable effect on the association between relationship quality and patient loyalty. To improve the physician-patient relationship in the medical service industry, health care managements should not ignore the 3 relationship quality tactics perceived by patients, specially the role of the potential effect of patient gratitude on relational building.

#### **Keywords**

relationship quality, patient loyalty, patient gratitude, mediation

#### What do we already know about this topic?

A better relationship strategy improves the relationship between the service provider and customer, and further enhances customer loyalty or the service provider's performance.

How does your research contribute to the field?

This study investigated physician-patient interactions with reference to relationship marketing, and to further understand the relationships among relationship quality, patient gratitude, and patient loyalty.

What are your research's implications toward theory, practice, or policy?

To improve the physician-patient relationship in the medical service industry, health care managements should not ignore the potential effect of patient gratitude on relational building.

# Introduction

Taiwan's medical service system provides the public comprehensive health care. According to the annual report of the National Health Insurance Administration (NHIA), the National Health Insurance (NHI) system now covers 99.6% of Taiwan's population.<sup>1</sup> In other words, since the implementation of the NHI system, barriers to medical care have been substantially reduced and patients can depend on their preference to freely choose hospitals with quality services. With the enhancement of medical quality, patients not only more care about the professionalism of medical service providers, but they also expect higher quality medical care.<sup>2,3</sup> Furthermore, hospitals are facing several management challenges such as <sup>1</sup>Hubei University of Economics, Wuhan City, China

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Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (http://www.creativecommons.org/licenses/by-nc/4.0/) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access pages (https://us.sagepub.com/en-us/nam/open-access-at-sage). rising hospital competition costs and stringent government regulations, and the medical care expense controls imposed by NHIA. Hospital managements therefore need to maximize the value perceived by patients and active initiatives to strengthen the relationship with patients to survive in such a competitive and rapidly changing environment of the medical service industry.

In the past, the interaction between physicians and patients was typically limited to patients' compliance with physicians' instructions, or the relationship was an information exchange for the purpose of treatment.<sup>4</sup> In a physicianpatient relationship, both parties need to engage in an interactive process because of the uncertainties and complex process of medical treatment. Various studies on relationship marketing have demonstrated that relationship quality is based on a long-term relationship between customers and providers, and this high-quality relationship is an integral concept that combines satisfaction, trust, and commitment.<sup>5,6</sup> Satisfaction is an emotional evaluation of the quality and trading relationship, as perceived by customers.<sup>7,8</sup> Positive customer satisfaction tends to maintain the current trading relationship and to enhance the intentions of repurchase.<sup>9,10</sup> In line with the assumption of commitment-trust theory, trust is a belief of being able to rely on one another in the relationship,<sup>11</sup> and a successful relationship will be established based on positive interactions between each other.<sup>12</sup> Commitment is the consumer's desire to continue a relationship with the seller because of a positive attitude, accompanied by the consumer's willingness to maintain the relationship.<sup>11</sup> Higher levels of commitment are correlated with higher levels of retention.<sup>13,14</sup> These 3 components of relationship quality represent the perceptions of evaluation in the relationship, which helps to build a better relationship. Based on the above discussion, an improvement in relationship quality can positively contribute to organizational performance, such as customers' repurchase behavior and promotion by word of mouth.<sup>3,15,16</sup> In other words, a better relationship strategy improves the relationship between the service provider (physician or nurse) and customer (patient), and further enhances customer loyalty or the service provider's performance.<sup>16,17</sup> Particularly, using formal and informal networks to spread word-of-mouth, loyal patients help physicians locate other patients with similar diagnosis and treatment conditions.<sup>18</sup> Aside from the benefits of patient loyalty, physicians can take pride in the fact that loyalty improves medical quality because it promotes stability and continuity of health care.<sup>18</sup> However, empirical practices of health care organizations concerning the enhancement of patient loyalty through maintenance of good relationships with patients are still ambiguous.<sup>19</sup> It is therefore critical to recognize how relationship quality potentially contributes to patient loyalty.

In the marketing field, gratitude has been widely discussed with reference to building a long-term relationship between a company and customer.<sup>20,21</sup> Gratitude is a pleasant mood and is a positive experience of the recipient who recognizes the benefit from the giver, which in turn represents his or her feedback.<sup>22-24</sup> General speaking, gratitude occurs when a customer perceives that a company behaves advantageously for the customer.<sup>21,25</sup> Customers thus feel they should maintain the relationship and express the thankfulness by returning loyalty.<sup>21,26</sup> Many consumer behavior studies have examined the role of gratitude in a long-term relationship and further indicate that gratitude is the essential instrument for promoting customer loyalty.<sup>27-29</sup>

In the field of medical services, it is common that a patient through words or behavior expresses his or her gratitude to the medical staff due to their endeavor to rescue the patient's life and health, or the medical staff's special support that was provided to the patient in a complex situation. Based on the basis of reciprocity theory, when a patient feels gratitude, he or she will want to repay the benefactor<sup>24,30</sup> since patient believes that medical staff offer benefits (eg, courteous and friendly services, treatment with respect) that are related to altruistic motives.<sup>31</sup> That is, a patient, after knowing the efforts the medical staff make to maintain the physicianpatient relationship, will generate gratitude toward the medical staff and a mutual-benefiting cycle of give and take and make the patient-hospital relationship last. Most of the past academic research on patients' perceived benefits has not acknowledged the role of positive emotions, such as gratitude, in patient response models. Few studies have clearly identified the connection between patient gratitude and physician-patient relationship, particularly the effect of patient gratitude on patient loyalty.<sup>32,33</sup> As health care organizations seek to create a long-term relationship with the patient, understanding how patient gratitude impacts physicianpatient relationship is essential. It is therefore important to recognize the role of the patient's gratitude on a long-term physician-patient relationship.

With that in mind, the contributions of this study are twofold. First, this study investigates the relationships among relationship quality, patient loyalty, and patient gratitude in the health care context. The investigation of connections among these 3 variables is critically important because it evaluates the experiences the patients have perceived after the medical treatment, which contributes to understanding the physician-patient relationship in the medical service industry. As such, we state that the 3 variables are the most basic way in improving the quality of medical services for patients and reducing adverse medical events in hospitals.

Second, to the best of our knowledge, this study is the first to target the physician-patient relationship through the appreciation patient have received in the medical treatment. We propose that patient's gratitude could be an important stimulant for the interaction between the medical staff and patient because patient's appreciation may have a positive impact on the likelihood of patient's returning to the hospital or promoting the hospital through word of mouth.

## **Research Framework**

In the current study, we proposed our research framework to demonstrate the relationship among key constructs (as shown in Figure 1). Relationship quality emphasizes on the establishment of long-term mutually beneficial relationships with customers, and these customers relationships have been regarded as an essential asset that is more likely to lead to repurchase behaviors in a number of industries.<sup>34</sup> While there are different conceptualizations of relationship quality, it is often agreed that satisfaction, trust, and commitment are the key aspects of relationship quality.<sup>5,6</sup>

Studies on health care services have indicated that satisfaction, trust, and commitment are critical antecedents of patient loyalty.<sup>35-37</sup> Several studies further demonstrated that a higher patient return rate results from a better relationship quality. For example, Wu<sup>38</sup> and Weng et al<sup>19</sup> showed that a stronger physician-patient relationship can not only generate a significant impact on the patient's loyalty to the hospital but it can also make patients more likely to introduce the physician to others. Patient's perceived satisfaction with the treatment process in hospitals is greatly related to the propensity to return.<sup>39,40</sup> Higher levels of commitment and trust are also two essential patient relationship tactics which have a significant positive impact on patient lovalty.<sup>41,42</sup> In other words, a better relationship quality will reduce the conflict between patients and physicians and improve patient trust in; and increase commitment to health care organizations, and enhance patient satisfaction with physicians. Strengthening the relationship quality via satisfaction, trust, and commitment is indeed an important way to enhance patient loyalty. Consequently, the first hypothesis is proposed:

**Hypothesis 1 (H1):** Relationship quality significantly influences patient loyalty.

Previous studies have mainly explored how to strengthen patient loyalty with reference to medical service quality;<sup>40,43,44</sup> however, there has been little discussion of other important factors affecting patient loyalty, specifically, through a better physician-patient relationship.<sup>3</sup> In particular, through words or behavior, a patient expresses his or her gratitude to the medical staff in the medical service industry. Gratitude represents the emotional core of reciprocity and plays a key force in building of a mutually beneficial relationship.<sup>27</sup> The effect of gratitude on relationship developing has been discussed in the marketing domain.<sup>4</sup> For example, Eggert et al<sup>28</sup> revealed that retailer's offers of a customer-oriented program leads to loyally intentions via customer gratitude. Yoon and Kim<sup>45</sup> demonstrated that the association between relationship investment and consumer intention toward online streaming services is moderated by gratitude. Additionally, the emotional response of customer gratitude plays an emergemt role in enhancing the longevity of the relationship between customers and the organization, which will lead to positive performance such as customer statisfaction, relationship intentions,

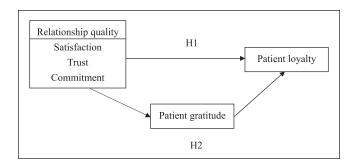


Figure 1. The proposed research model in this study.

and trust.<sup>46,47</sup> Gratitude is worthy of attention because it provides insights into customer's perceptions of, and feelings for, relationship marketing investments in a process of relational exchange.<sup>47</sup> However, it is still unclear how and when patient gratitude will predict the relationship between relationship quality and patient loyalty in the health care organizations. This study therefore aimed to identify the relationships among relationship quality (ie, satisfaction, trust, and commitment), patient loyalty, and patient gratitude. In particular, the roles of patient gratitude with reference to its impact on the relationship between relationship quality and patient loyalty and patient loyalty were investigated. The second hypothesis is proposed as follows:

**Hypothesis 2 (H2):** The relationships between relationship quality and patient loyalty are mediated by patient gratitude.

# Methods

### Data Collection

Respondents who received medical treatment in any hospital in Taiwan during the year of 2015 were requested to respond to the survey. A pretest was conducted via a survey of 50 respondents to ensure that items and response options were appropriately interpreted.<sup>48</sup> Each respondent in the study was informed that consent to use of the data is implied by their participation. After testing, formal surveys with simple convenience sampling were given to respondents in hospitals. A total of 800 questionnaires were collected and 731 valid questionnaires were used for the analysis. There were 69 unusable questionnaires, yielding an effective response rate of 91.37%.

#### Instruments

Items from prior research were used as the basis of measurement. The items were originally designed in English. In this study, the original questionnaire was translated into Chinese by the researcher. After the first draft of the Chinese version questionnaire, one bilingual translator (Chinese/English) assisted to correct some translation errors and made the sentences more fluent. Back-translation then was adopted by another bilingual translator to confirm that the meaning of words and sentences were not changed.<sup>49</sup>

Although there is no clear consensus on the most appropriate conceptualization of relationship quality, there is general agreement that satisfaction, trust and commitment are crucial dimensions of relationship quality (see for example, McDonnell et al<sup>5</sup>; Ndubisi<sup>6</sup>; Hsieh and Hiang<sup>50</sup>; Walter et al<sup>51</sup>; Golicic and Mentzer<sup>52</sup>; Roberts et al<sup>53</sup>). In this study, relationship quality is regarded as a multidimensional metaconstruct composed of 3 interrelated core dimensions (satisfaction, trust, and commitment). This approach provides an opportunity to recognize the relative impact of each dimension on the outcomes of the relationship.<sup>54</sup>

The 11 items used to measure satisfaction were drawn from study by Roberts et al.<sup>53</sup> This included item such as, "My medical needs can adequately meet in this hospital." The 5 items used to measure trust were based on Hsieh and Hiang<sup>50</sup> study, for example, "I think this hospital is trustworthy because it will provide stable and reliable services." Six items measuring commitment were selected from studies conducted by Walter et al<sup>51</sup> and Golicic and Mentzer.<sup>52</sup> This included item such as, "all the promises made by this hospital to you can be done." Patient loyalty was measured using 6 items based on the study conducted by Ibáñez, Hartmann, and Calvo.<sup>55</sup> Following Lanham et al<sup>56</sup> and Palmatier et al<sup>4</sup> measures, 5 items were adapted to evaluate patient gratitude. For example, patient gratitude might say, "I appreciate what this hospital has done for me." Additionally, 5-point Likert scales anchored by 1 (strongly disagree) and 5 (strongly agree) were used throughout the questionnaire.

#### Data Analysis

After data screening, a confirmatory factor analysis (CFA) instead of exploratory factor analysis was performed using Amos (Version 20.0; IBM Inc. New York, Armonk) to verify the structure of a set of observed constructs because the items measuring constructs have been previously established and tested.<sup>57</sup> Multiple regression analysis was sequentially employed using SPSS (Version 20.0; SPSS Inc., Chicago, Illinois) to identify the relationships among relationship quality (ie, satisfaction, trust, and commitment), patient loyalty, and patient gratitude. In particular, the role of patient gratitude on the relationship between relationship quality and patient loyalty was examined, which appears to enhance physician-patient relationship.

# Results

#### Sample Characteristics

The sample profile demonstrated that most respondents were female (65.3%), their age ranged from 21 to 50 years (70.1%), and they were educated up to the bachelor's level

Table 1. The Results of Mean, SD, Cronbach Alpha, CR, and AVE (n = 731).

Construct	Mean	SD	α	CR	AVE
Satisfaction	3.901	0.5435	0.93	0.97	0.72
Trust	4.011	0.5717	0.94	0.97	0.87
Commitment	3.821	0.5902	0.90	0.94	0.75
Patient loyalty	3.744	0.6407	0.91	0.93	0.71
Patient gratitude	3.940	0.6069	0.94	0.96	0.86

Note. AVE = average variance extracted; CR = composite reliability.

(54.4%). Around one third of the respondents reported that they worked in the service industry. Over a half of the respondents report that their monthly income was around TWD \$16000 to TWD \$48000.

#### Empirical Results

The CFA results showed that the initial-fit indices met satisfactory levels of overall model fit. For example, acceptable absolute fit indices ( $\chi^2/df = 3.042$ ), goodness of fit index = 0.87, root mean square residual = 0.02, and root mean square error approximation = 0.05, incremental fit indices, Tucker-Lewis index = 0.90, comparative fit index = 0.95, and incremental fit index = 0.95, and parsimonious fit indices (parsimonious normed fit index = 0.83 and parsimonious goodness-fit-index = 0.74) were achieved.<sup>58</sup> As shown in Table 1, the composite reliability estimates for constructs ranged from 0.93 to 0.97, and thus, exceeded the recommended 0.60 threshold, which satisfies the acceptable threshold value.<sup>59</sup> Average variance extracted (AVE) ranged from 0.71 to 0.87, all of which were the recommended level.<sup>60</sup> The Cronbach  $\alpha$  values for all the constructs exceed 0.9, which indicates that the scales had great reliability and internal consistency. Additionally, the highest mean score was observed for trust, while the lowest mean score was on patient loyalty. To test for possible nonresponse bias, the salary level and categories of work were used as contextual variables. Results indicated that there are no significant difference at a 0.05 significance level for the two contextual variables. Therefore, nonresponse bias does not represent a significant concern in this study.

A multiple regression analysis was performed to examine the effect of relationship quality (ie, satisfaction, trust, and commitment) on patient loyalty through patient gratitude. The results indicated that satisfaction ( $\beta = 0.776$ , P = .07), trust ( $\beta = 0.623$ , P < .01), and commitment ( $\beta = 0.759$ , P = .07) had positive significant impact on patient loyalty, respectively. Therefore, H1 was supported.

Hayes<sup>61</sup> mediation conditions were examined to test the mediating effects of patient gratitude. The patient gratitude is assumed to be caused by 3 components of relationship quality and to cause the patient loyalty. The bootstrapping bias-corrected confidence interval (CI) procedure was used to

Table 2. The Summary of	Path Analysis.
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Hypothetical path (mediator)	Expected sign	Research results
Relationship quality $\rightarrow$ patient gratitude $\rightarrow$ patient loyalty	+	Support
Satisfaction $\rightarrow$ patient gratitude $\rightarrow$ patient loyalty	+	Support
Trust $\rightarrow$ patient gratitude $\rightarrow$ patient loyalty	+	Support
Commitment $\rightarrow$ patient gratitude $\rightarrow$ patient loyalty	+	Support

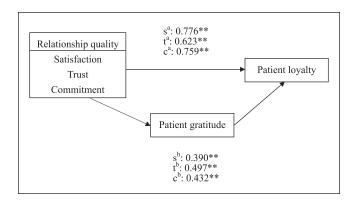


Figure 2. Path modeling. Note. S = satisfaction; t = trust; c = commitment.

<sup>a</sup>Direct effect.

<sup>b</sup>Mediating effect.

\*\*P < .01.

evaluate the significance and different effects (direct and indirect) in the model. The indirect effect of satisfaction on patient loyalty through patient gratitude was significant (indirect effect = 0.390; 95% bootstrap CI, 0.303-0.487; P < .001) because the CIs did not include zero. The indirect effect of trust on patient loyalty through patient gratitude was also significant (indirect effect = 0.497; 95% bootstrap CI, 0.432-0.570; P < .001). Similarly, the indirect effect of commitment on patient loyalty through patient gratitude was significant (indirect effect = 0.358; 95% bootstrap CI, 0.295-0.431; P < .001). The mediating role of patient gratitude on the relationship between relationship quality and patient loyalty was confirmed in this study. Hypothesis 2 was therefore supported. The path modeling for constructs was given as shown in Figure 2. The summary of path analysis was shown in Table 2.

#### Discussion

In a highly competitive health care industry, establishing a close physician-patient relationship, providing good medical services, and strengthening patient loyalty have become keys to a sustainable development of health care organizations. The purpose of this study was to discuss the physician-patient interactions by examining the relationships among relationship quality, patient gratitude, and patient loyalty. Particularly, the mediating role of patient gratitude on the connection between relationship quality and patient loyalty

was further investigated. Based on the results, satisfaction, trust, and commitment were found to substantially contribute to patient loyalty. The results of this study are consistent with previous studies that reported that better loyalty could be driven by patients' perceived satisfaction and trust in the hospital services and also by a supportive commitment from the hospital in the health care service industry.<sup>35,41,62</sup>

In addition, satisfaction, trust, and commitment produce notable effects on loyalty for patients with gratitude. The results showed that satisfaction, trust, and commitment contribute to patient loyalty via patient gratitude. In other words, a better relationship quality (ie, satisfaction, trust, and commitment) could stimulate patient loyalty by promoting patient gratitude. Patient gratitude was proven to be a critical factor in enhancing patient loyalty. This research confirmed that gratitude importantly drives a successful relationship between the physician and patient. Patients who perceive a high-level relationship quality (satisfaction, trust, and commitment) from the health care provider in the treatment procedure will translate their perceptions into a positive value and thankful experience, which in turn increases patient return rates. The results are similar to those of Palmatier et al<sup>4</sup> and Fazal e Hasan et al,<sup>46</sup> which indicated that gratitude is a critical psychological mechanism that can better mediate the relationship between the customer perceptions of relationship marketing investments and positive benefits of the relationship they have with that service provider. More specifically, a hospital's relationship marketing investments (eg, patient satisfaction, trust, and commitment) generate patients? feelings of emotional appreciation (ie, gratitude) that drive hospital performance benefits based on patients' gratituderelated reciprocal behaviors. Hence, management of health care organizations should not ignore the potential effect of patient gratitude to improve the physician-patient relationship. Potentially relevant factors that cause patients a significant positive should be explored in the medical service industry. For example, complaints, beneficial perceptions, and reciprocity are antecedents of gratitude. 45,63,64 Whether or not these antecedents influence patient gratitude is worthy of further investigations.

# Implications

This study offers important insights for the managements of health care organizations to enhance the physician-patient relationship. First, the findings of this study indicate that 3 relationship quality tactics perceived by patients have a positive impact on the likelihood of their returning to the hospital. A regular program of promoting patient-based activities is suggested to be provided. The legal rights of patients, medical ethics, and attitudes toward the physician-patient interaction need to be announced in the program. Moreover, physician-patient relationship can be enhanced by implementing effective performance appraisal mechanisms, facilitating transparent communication between the medical staff (physicians and nurses) and patients, improving communication in adverse events, and enhancing the sense of belonging and participation.

Second, this research increases our knowledge about the development of physician-patient relationship by leveraging the role of patient gratitude. A hospital could interact with patients in a warm and personal way to strengthen patient gratitude and it turn promote their returning to the hospital. A customer relationship management database should be established to realize patient-oriented demand. Patient-oriented strategies present a concept of customization, which particularly realizes the characteristics of patients and reminds the suitable health care services for patients. Nevertheless, the results of patient experience and clinical outcomes should be transparent to drive the improvement in medical quality.

# Limitations and Future Research Directions

This study has its limitations. First, the respondents were Taiwanese clients who create generalizability concerns. The generalizability of these findings may not relate to other populations/cultures. Particularly, in the Chinese culture, people usually pay more attention to Guan-Xi and relationship building, which may facilitate the effect of gratitude on the physician-patient relationship. Cultural differences are suggested to influence the way consumers behave.<sup>65</sup> It would be useful to validate the findings of this research with respondents drawn from Western countries in the future. Second, there is a need to extend the proposed model by integrating other intrinsic variables. For example, communication skills and channels might be key factors that lead to a superior physician-patient relationship. Physicians who communicate friendly with their patients present fewer disputes and thus suffer less disruption in the process of medical treatment.<sup>33</sup> Likewise, further studies may consider level of patient gratitude to identify the impact of moderation effect on the physicianpatient relationship.

Finally, our research model was assessed in the health care context which is identified as a high-contact service industry. Whether the model could be generalized to other contexts requires further empirical investigation. For example, while the customers (patients) in hospitals may experience higher gratitude than those who deal with a low-contact service such as infocommunications industry, and post and telecommunications industries.

#### Conclusions

This study argues that there is a need to examine the impact of gratitude on relationship quality and patient loyalty to continuously persuade a better physician-patient relationship in the medical services context. The results suggest that investments that relationship tactics (ie, satisfaction, trust, and commitment) might contribute substantially to enhancements in the patient loyalty. Moreover, our research account for interaction effects of patient feelings of gratitude on relationship quality and patient loyalty to explain why a positive emotion might sway a good physicianpatient relationship. Patient gratitude may be an important underlying mechanism for a relationship building in the medical service industry. Implementations relating to the variables analyzed in this study should be given high priority in physician-patient interventions.

#### **Declaration of Conflicting Interests**

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#### Institutional Review Board Approval

The clinical trial approval certificate (ethic statement) was approved by Cheng Ching General Hospital in Taichung City, Taiwan with approval number HP160012.

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