OPEN ACCESS Freely available online

ISSN: 2167-0358
Journal of Socialomics

Research Article

# The Role of Perceived Responsibility in Patient Complaint Management

**Ghrab Hatem[1], Mohamed Baaziz[2,3*], Dorsaf Sariati[2], Abderraouf Ben Abderrahman[2]**

*[1]Department of Business Management, High Business School of Tunis, Manouba, Tunisia; [2]Department of Physical Education and Sports, Higher Institute of Sport and Physical Education of Ksar-Said, University of Manouba, Cité Nasr 2010, Tunisia; [3]Department of Physical Education and Sports, Higher Institute of Sport and Physical Education of Gafsa, University of Gafsa, Gafsa, Tunisia*

## ABSTRACT

When customers complain, they express their dissatisfaction with a company or a service provider and request that their complaints are processed. Accordingly, this paper tries to determine the role of perceived responsibility in managing complaints following a service dysfunction. After a review of the relevant literature, we propose a research model that estimates how perceived responsibility mediates the contribution of justice dimensions to customer satisfaction and this latter's effect on the relationship between perceived quality and perceived justice dimensions. The proposed model is tested on a sample of 350 patients from several private clinics located in Tunis.

**Keywords:** Perceived responsibility; Complaint management; Justice theory; Perceived service quality; Satisfaction

## INTRODUCTION

When processing complaints, justice, satisfaction and trust towards the provider as perceived by customers are crucial. The service provider should act appropriately with customers who have complained about a service failure. They should be perceived by customers as being fair and equitable in how they properly handle complaints and therefore as able to generate a favorable response to retain dissatisfied customers.

The concept of ambiguity that prevails during problem resolution may have a serious effect on post-complaint satisfaction and the continuity of the business relationship between the two.

Faced with customer dissatisfaction, firms dispose of two strategies. The first is to act on the cost/benefit ratio perceived by customers by attempting to put emphasis on service quality and/or the extent of the efforts deployed to satisfy its customers and minimize incident-related losses. The second is to reduce the company's responsibility in order to hedge customer dissatisfaction and maximize on their repair expectations. Whatever the solution, it is therefore necessary to identify the responsibility of the company in the eyes of the customer. As a result, understanding the background and consequences of customer complaints and dissatisfaction has become crucial and defining how customers perceive firm responsibility is worthy.

This paper tries to determine how perceived responsibility impacts the contribution of justice dimensions to customer satisfaction and its effect on the relationship between perceived quality and perceived justice dimensions.

Complaints may be defined as customer objections with a company for the purpose of obtaining an exchange, a refund, or an apology. They are the expression of a customer's negative feedback. Sabadie et al. and Ltifi and Gharbi define a complaint as a request for information, a settlement and/or a compensation, made by the customer to the organization following dissatisfaction involving the organization, perceived by the customer [1].

Claiming assumes that the customer holds the service provider responsible for the dissatisfaction. Accordingly, a complaint is a golden opportunity to expand customer-provider relationships. Complaint management is the actions taken by a business to handle dissatisfaction. Its purpose is to restore the complainant's satisfaction in order to soothe the relationship with the partner. Good and fair complaint management needs an ongoing assessment. The marketing literature offers two strategies. The

**Correspondence to:** Mohamed Baaziz, Department of Physical Education and Sports, Higher Institute of Sport and Physical Education of Ksar-Said, University of Manouba, Cité Nasr 2010, Tunisia; E-mail: baazizmohamed420@gmail.com

**Received:** 30-Jan-2024, Manuscript No. JSC-24-24721; **Editor assigned:** 01-Feb-2024, PreQC No. JSC-24-24721 (PQ); **Reviewed:** 15-Feb-2024, QC No. JSC-24-24721; **Revised:** 05-Feb-2025, Manuscript No. JSC-24-24721 (R); **Published:** 12-Feb-2025, DOI: 10.35248/2167-0358.25.14.257

**Citation:** Hatem G, Baaziz M, Sariati D, Abderrahman AB (2025) The Role of Perceived Responsibility in Patient Complaint Management. J Socialomics. 14:257.

first refers to the expectations disconfirmation model of Oliver while the second bears on justice theory. Smith et al. and Wu suggest that complaining is likely to influence the contribution of justice dimensions to customer satisfaction.

In addition, complaint management offers the company the opportunity to see the causes of the problem. Therefore, identifying the origin of the problem is an essential part of the complaint management process. Johnston states that holding whoever accountable is a function of the cause of the incident (internal or external). Gammoudi et al., defines accountability as the commitment to respond to the damage that one partner inflicts on another. Accountability therefore arises when the customer expresses dissatisfaction. The main purpose of allocating responsibility is to repair the damage caused by the service provider. Most complaint behavior research conceptualizes attribution of responsibility as an independent variable explaining customers' reactions to dissatisfaction. Sabadie et al. and Rivera et al., show that perceived responsibility has an impact on overall satisfaction. Then, whatever the complaint management quality, accountability worsens the strength of the relationship between the customer and the company. Post-complaint satisfaction affects overall satisfaction regardless of perceived company responsibility [2].

Filing a complaint assumes that the customer holds the provider completely or partly responsible for their dissatisfaction. Allocating responsibility is the customer's right. Indeed, even if the company is not responsible, but the customer is convinced otherwise, he/she will wait for a complaint management proportional to perceived responsibility. Thus, identifying whoever responsible is a critical issue in the complaint management process. Smith et al., link three variables. These are liability, perceived justice, and post-complaint satisfaction. Measuring provider liability could be done in two distinct ways:

The first approach is to evaluate the different responsibility allocation dimensions made by the customer and then to measure each of them independently. The second approach is to directly estimate the provider's liability by assessing how they initially tackled the problem. Accordingly, for both approaches liability attribution theory plays an important role. This theory has been developed to understand the cognitive processes used by individuals to explain the results of their behavior and that of others. Subscribing to attribution theory Folkes, Richins state that dissatisfied consumers seek to determine the cause(s) of dissatisfaction and accordingly attribute liability for the cause of this dissatisfaction. For this reason, allocating responsibility following a service failure is presented as a variable explaining the customer's complaint behavior.

In marketing, attribution theory is considered an adequate theoretical framework to understand the role of accountability. Weiner and Lude Marieta Gonçalves dos Santos and Fabio shows that when there is a service and/or product failure, consumers tend to engage in a cause-attribution process. Vidal believes that cause attributions decisively affect the response mode selected between two parties [3]. The literature review distinguishes between two types of attributions:

- **External attribution of cause:** Customers will tend to feel that they deserve compensation and apology.
- **Internal attribution:** Customers will be less dissatisfied with a service when the problem is attributed for example to sales staff, inside the provider's premises. Failures are considered controllable by the company, then customer ratings will be more provider-oriented.

Cause attribution is evaluated at three distinct levels:

- **Cause source:** It refers to the source of the problem and consists of an internal search (to oneself) or external search (the provider, the environment).
- The partner's responsibility is the degree of responsibility or influence of the source on the event.
- The persistence of the problem refers to the temporary or permanent effect of the incident.
- Several authors like Laufer et al. and Choi and Mattila showed that if the customer perceives that service failure is the fault of the company and that it could have been avoided, customers' reactions will be negative. This is what we will try to show in this paper.

## The research model and the research hypotheses

Andaleeb and Basu showed that perceived justice is an important determinant of service evaluation quality. Studying customers' perception of quality evaluation, Parasuraman et al. underline the importance of facing the service and staff. The quality of a product or service has several dimensions. For example, in the service area, Brady and Cronin and Grönroos distinguishes between a technical dimension and a functional dimension. The first denotes the dimension of distributive justice. It focuses on the outcome of the service. The functional dimension relates to the interactional and procedural dimensions of perceived justice.

The evaluation dimension of a complaint handling experience is introduced by the literature on service quality, organizational justice and social justice. Thus, we assume that service quality of a private health institution has a direct impact on perceived justice dimensions. We formulate the following hypothesis:

**$H_1$:** Service quality has a positive direct impact on perceived justice dimensions.

**$H_{1.1}$:** Service quality has a positive direct impact on the distributive dimension of justice

**$H_{1.2}$:** Service quality has a positive direct impact on the procedural dimension of justice.

**$H_{1.3}$:** Service quality has a positive direct impact on the interactional dimension of justice.

Perceived justice is one of the determinants of satisfaction or dissatisfaction. Perception of justice results from a three-dimensional evaluation process (distributive, interactional and procedural). It influences satisfaction with the complaint processing task.

Several authors pointed to the crucial role of distributive justice in customer satisfaction. Hart et al. and Tax et al., argued that corporate compensation may affect customer satisfaction.

Orsingher et al. show that perception of distributive and interactional justice strongly affects customer satisfaction and behavior, while procedural justice plays a very feeble role.

Several studies highlighted the effect of justice on satisfaction. These studies have all shown that perceived justice positively affects satisfaction. Then, it is hypothesized that customer perceived justice (distributive, procedural and interactional), has a direct and a positive effect on post-complaint satisfaction [4].

**$H_2$: Does customer perceived justice have a positive and a direct impact on post-complaint satisfaction?**

**$H_{2.1}$:** Does distributive justice have a positive impact on satisfaction?

**$H_{2.2}$:** Does interactional justice have a positive impact on satisfaction?

**$H_{2.3}$:** Does procedural justice have a positive impact on satisfaction?

In the service literature, there is a debate about the distinction between satisfaction and service quality. This debate was triggered by the definition given to perceived service quality, proposed by Parasuraman et al.

Some authors have shown that satisfaction precedes quality, and even maintain that quality is a factor explaining satisfaction. However, Bolton and Drew argue that satisfaction is a factor explaining quality. Cronin and Taylor, Oliver et al., Parasuraman et al., and Spreng and Mackoy found that service quality is a factor explaining satisfaction.

Teas, Parasuraman et al., Ngobo, Prim and Sureshchandar et al. lean towards a compromise between the two opinions by stating that he two do not necessarily contradict each other. They believe that everything depends on the selected analytical framework (transactional *vs.* relational).

In the context of relationship marketing, recent research has corroborated the idea that perceived quality evaluation determines satisfaction.

Subscribing to relationship marketing, we consider that quality is a factor explaining satisfaction. This causality link has been studied in several fields, but to our knowledge no study has examined private health institutions in Tunisia. Then, we propose the following hypothesis:

**$H_3$: perceived service quality of the clinic positively affects patient satisfaction.**

Complaint handling evaluation dimensions are reviewed in the literature on service quality. Clemmer considers that flexibility, waiting time/responsiveness and efficiency (dimensions of procedural justice) are also associated with customer satisfaction and service quality. Moreover, Bitner et al. and Tyler found that only interpersonal treatment contributes to customer satisfaction, to improved service quality, to better complaint processing assessment, and to creating more favorable purchase intentions [5].

The justice felt therefore has an influence on quality (justice-quality), and on satisfaction (justice-satisfaction).

Bearing on these results, we can formulate our hypothesis on service quality as follows:

**$H_4$: Perceived justice plays a mediating role between perceived quality and post-complaint satisfaction.**

**$H_{4.1}$:** Distributive justice plays a mediating role between perceived quality and post- complaint satisfaction.

**$H_{4.2}$:** Interactional justice plays a mediating role between perceived quality and post- complaint satisfaction.

**$H_{4.3}$:** Procedural justice plays a mediating role between perceived quality and post- complaint satisfaction.

Several studies have shown that corporate responsibility has a significant impact on customers. According to attribution theory of Kelley, dissatisfied customers engage in a process of allocating responsibilities. More specifically, it seems that corporate responsibility has a direct and an indirect impact on customer attitudes towards services/products and their identification with the firm.

Weiner, Kelley and Folkes noted the importance of considering accountability in the complaint management strategy. They suggest that the customer's attribution of responsibility could moderate the effectiveness of the strategies proposed by the company.

A dissatisfied customer is likely to damage the business in different ways: By breaking the relationship or by engaging in a negative WOM in particular. Sabadie et al. and Osarenkhoe and Komunda studied the impact of perceived responsibility on the role of satisfaction with complaint management. These authors found, on the one hand, that the higher the perceived responsibility, the more dissatisfaction affects satisfaction with complaint management. On the other hand, the higher perceived responsibility, the higher satisfaction with complaint management affects overall satisfaction.

Luo and Bhattacharya and Pérez and Rodríguez del Bosque argue that customers are likely to be more satisfied with the products and services offered by a responsible company. Their results indicate a direct link between corporate responsibility and customer satisfaction. Indeed, when a customer challenges the service provider, we may wonder to what extent responsibility attribution is sensitive to affect service quality and customer post-complaint satisfaction [6].

These results highlight the importance of accountability in the complaint management strategy. Determining the level of corporate responsibility, as perceived by the client, could moderate the relationship between service quality and perceived justice dimensions and also moderate the relationship between these dimensions and post-complaint satisfaction. Bearing on these conclusions, we formulate the following hypotheses:

**$H_5$: Perceived responsibility moderates the relationship between perceived quality and the dimensions of perceived justice.**

**$H_{5.1}$:** Perceived responsibility moderates the relationship between perceived quality and distributive justice.

**$H_{5.2}$:** Perceived responsibility moderates the relationship between perceived quality and procedural justice.

**$H_{5.3}$:** Perceived responsibility moderates the relationship between perceived quality and interactional justice.

**$H_6$: Responsibility moderates the relationship between the dimensions of perceived justice and post-complaint satisfaction.**

**$H_{6.1}$:** Responsibility moderates the relationship between distributive justice and post-complaint satisfaction.

**$H_{6.2}$:** Responsibility moderates the relationship between procedural justice and post-complaint satisfaction.

**$H_{6.3}$:** Responsibility moderates the relationship between interactional justice and post-complaint satisfaction (Figure 1).

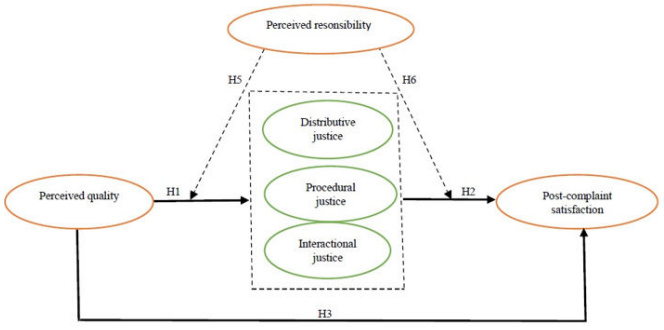


**Figure 1:** Importance of accountability in the complaint management strategy.

## MATERIALS AND METHODS

Our sample consists of short-and long-stay patients in Tunisian private clinics. As a pre-test stage, we administered five hundred electronic questionnaires *via* e-mail boxes of social networks (Facebook, Twitter...). Finally, we received only 200 questionnaires. The second stage consisted of face-to-face interviews of 350 patients. In our study, we chose a non-probabilistic sampling method because we do not have a population base. We chose a sample size of 350 patients in several clinics located in the Greater Tunis area [7].

We then assessed the quality of each measurement scale, in particular its dimensionality, reliability and convergent and discriminant validity. Assessing the dimensionality, the reliability and validity of the measurement scales is carried out by means of an Exploratory Factor Analysis (EFA) with the help of SPSS software (Version 25, IBM, Armonk, NY, USA). Next, we conducted a Confirmatory Factor Analysis (CFA), using the AMOS software (Version 25, IBM, Armonk, NY, USA).

Finally, we have identified the relationships between perceived service quality and perceived justice dimensions. The present study was fully validated by the ethics committee before the commencement of the assessments. Written informed consent was collected from each patient before starting the work. The participation of the patients was voluntary. The raw data obtained by the participants were analyzed to ensure maximum confidentiality [8].

## RESULTS AND DISCUSSION

The demographic characteristics of the sample population are present in Table 1.

**Table 1:** Demographic characteristics of patients in Tunisian private clinics.

| | | Pre-test sample | | Final sample | |
|---|---|---|---|---|---|
| | | **Effective** | **Pourcentage (%)** | **Effective** | **Pourcentage (%)** |
| Gender | Male | 97 | 48.5 | 188 | 53.7 |
| | Female | 103 | 51.5 | 162 | 46.3 |
| Age | -50 years | 161 | 80.5 | 169 | 48.4 |
| | +50 years | 39 | 19.5 | 181 | 51.6 |

XTo justify the choice of data analysis methods and the different procedures taken to validate the measurement scales, we have used the Churchill method. The preliminary use of a Principal Component Analysis (PCA) allowed us to purify our measurement scales and to retain the variables that are reliable and adequate for our study in line with the conditions outlined by conventional measurement methods. Cronbach's alpha coefficients respect the recommended thresholds (Supplementary File). The results are satisfactory for all measurement scales. Similarly, convergent validity and reliability are satisfied since Jöreskog's Rhô of convergent validity respects the recommended threshold of 0.5 and 0.7. We checked the psychometric quality of our measurement instruments thanks to a confirmatory factor analysis. This analysis allowed us to confirm the factorial structure of the measurement scales used their internal reliability, their convergent and discriminant validity. In summary, the results were satisfactory in their entirety (Table 2) [9].

**Table 2:** Reliability and convergent validity of model variables.

| Factors | | Convergent validity (ρvc) | Jöreskog's Rhô (ρ) |
|---|---|---|---|
| Perceived responsibility | | 0.877 | 0.706 |
| Perceived quality | Environment quality | 0.817 | 0.899 |
| | Interactional quality | 0.736 | 0.917 |
| Distributive justice | | 0.749 | 0.899 |
| Procedurale justice | | 0.612 | 0.862 |
| Interactional justice | | 0.598 | 0.898 |
| Post-complaint satisfaction | | 0.721 | 0.911 |

**We then checked all the relationships and found that:**

Perceived service quality has a positive direct impact on perceived justice dimensions. This hypothesis has been divided into three sub-hypotheses because perceived justice consists of three dimensions (distributive, procedural and interactional justice). After running PCA and CFA on perceived justice, we found that:

- For distributive justice, we found a single dimension which is internal justice. This finding corroborates those of Adams, Pritchard and Kau and Wan-Yiun Loh, who found that justice is summed up in internal justice [10].
- For procedural justice, we found three dimensions: Accessibility, speed of processing and flexibility, the ability of the clinic to adjust its procedures and decisions according to the type of complaint. This finding corroborates those of Parasuraman et al., Andaleeb and Basu, Tax et al., Kau and Wan-Yiun Loh and Aurier and Siadou-Martin.
- Finally for interactional justice, we found five dimensions which are: Explanations given by the clinic, honesty, politeness, efforts and empathy. These results are in line with those of Tax et al., Kau and Wan-Yiun Loh and Aurier and Siadou-Martin.

On the other hand, PCA and CFA of the variable perceived service quality have shown that this variable breaks down into two distinct dimensions, in line with the work of Grönroos, and Parasuraman et al. On the one hand, technical quality denotes the service received by the patient and, on the other hand, environment quality refers to the evaluation of the environment and the setting of the establishment.

The results on hypothesis ($H_1$) showed that the sub-hypothesis ($H_{1.1}$) indicates that perceived service quality has a direct and positive impact on distributive justice (λ=0.821, t=14.031, p<.001). This result reveals that the higher perceived service quality is acceptable, the more the patient perceives "fair" what he has received from the clinic. This is in line with the results of some authors like Bowen et al., Kau and Wan-Yiun Loh and Aurier and Siadou-Martin. The results on Hypothesis ($H_{1.2}$) also showed that perceived service quality has a direct and positive impact on procedural justice (λ=0.854, t=13.300, p<.001). This result means that a good service quality should come along a fairness in the simplicity of the complaint process (accessibility), in the complaint processing speed and also in the ability of the clinic to adjust its procedures and decisions according to the type of the complaint (flexibility). The results on hypothesis H1 also revealed that perceived service quality has a direct and positive impact on interactional justice ($H_{1.3}$) (λ=0.962, t=16.807, p<.001), which means that the higher the perceived service quality, the better the interaction between the patient and the clinic is appreciated, *i.e.* when the patient receives explanations and perceives a conformity and a sincerity in this information (honesty), that he/she is treated politely by the staff (politeness), and that he/she feels there is an effort spent by the clinic to solve his/her problem (effort) and the clinic shows understanding (empathy), then he/she will be convinced of having received a good service quality [11].

Testing the positive direct effect of perceived justice dimensions on post-complaint satisfaction shows that out of three hypothetical relationships only two are significant, several authors have highlighted the positive and important impact of justice on post-complaint satisfaction like Oliver and Swan, Tax et al., Szymanski and Henard, and Aurier and Siadou-Martin. This hypothesis was divided into three sub-hypotheses because it has three dimensions. These are distributive justice $H_{2.1}$, procedural justice $H_{2.2}$ and interactional justice $H_{2.3}$. The results on this hypothesis revealed the positive and direct impact of distributive justice on post-complaint satisfaction (λ=0.259, t=6,680, p<.001), which means that for a better understanding of the contribution of distributive justice it therefore seems important to take into account internal justice. The results on $H_{2.1}$ showed that patients who are most satisfied with the treatment of their complaints are those who have had a fair treatment. Hypothesis $H_2$ also proved that procedural justice has a direct and positive impact on post-complaint satisfaction (λ=0.738, t=11.774, p<.001). These results corroborate those of Goodwin and Ross, Tax et al., Smith et al., Maxham and Netemeyer, Wirtz and Mattila, Homburg and Fürst, Siadou-

Martin, Orsingher et al. Nevertheless, they go against the results of Gelbrich and Roschk. The results on $H_{2.2}$ show that the more the institution listens to its patients, the more it simplifies the usual procedures imposed to respond to their complaints and the faster their response is, patients will be more satisfied with the repair obtained and develop a positive perception of the fairness of procedural justice. In contrast to Goodwin and Ross, Bitner et al., Tax et al., and Sabadie who support the positive and significant effect of interactional justice on post-complaint satisfaction, our study found that interactional justice has no impact on post-complaint satisfaction [12].

The results on the effect of perceived service quality on post-complaint satisfaction show that this relationship is significant (CR=11.652, p<.001). This finding corroborates several other studies, like those of Bitner et al., Bolton and Drew, and Cronin and Taylor, who support the idea that the better the technical and environmental quality, the better the customer will be satisfied [13].

**We also examined the mediating effect**

Following Baron and Kenny, we will first test the relationship between "perceived quality" and the dependent variable "post-complaint satisfaction". Examining the following table, we can conclude that this link is significant (CR=11.652, p<.001) (Table 3).

**Table 3:** Relationships between perceived quality and post-complaint satisfaction.

| Relations | Λ | SE | CR | p |
|---|---|---|---|---|
| Post-complaint satisfaction ← Perceived quality | 0.735 | 0.75 | 11.652 | <.001 |

Then, we will test the relationship between the independent variable "post-complaint satisfaction" and the mediating variable "distributive justice". It has been shown that post-complaint satisfaction has a significant effect on distributive justice. Finally, we will test the relationship (C') between the independent variable "post-complaint satisfaction" and the dependent variable "perceived quality" through the mediating variable "distributive justice".

There is mediation when the relation (C') between "post-complaint satisfaction" and "perceived quality" in the presence of "distributive justice" should be zero, otherwise it should be less than the relationship (C) between the two variables without the presence of the mediator (C=0.525 <C=0.735). We can conclude that mediation exercised by distributive justice is partial, since the relationship between post-complaint satisfaction and perceived quality is stronger in the absence of distributive justice. The effect of this mediation is 100 × (0.281 × 0.769)/((0.281 × 0.769)+0.525)=28.99% of the total effect. More specifically, patient's post-complaint satisfaction is linked to internal justice with regard to their perceived service quality. This effect is partial. These results are consistent with those of Tax et al.

The results show that perceived service quality positively affects post-complaint satisfaction (a) (CR=10,557, p<.001) and in turn procedural justice positively affects post-complaint satisfaction (b) (CR=6.686, p<.001). As for the relationship between perceived service quality and post-complaint satisfaction, it remains significant (CR=2.378, p<.001). The third condition of Baron and Kenny is also checked (C=0.230<C=0.735) [14].

By comparing these two regression coefficients, we can conclude that mediation is partial. The effect of this mediation is 100 × (0.659 × 0.802)/((0.659 × 0.802)+0.230)=69.70% of the total effect. It shows that procedural justice has a partial mediating effect between service quality and post-complaint satisfaction. This result shows that post-complaint satisfaction depends on procedural justice with regard to service quality. More explicitly, patients who perceive a service quality based on a "fair" procedural exchange *i.e.* speed of treatment, flexibility of decisions and accessibility of the complaint process, will be more satisfied with the results of the complaint management process. These results join those of Tax et al.

After checking the conditions of Baron and Kenny, we conclude that the relationship between interactional justice and satisfaction is insignificant (CR=-0.421, p=.673), while the second and third conditions are not significant.

The results of these tests showed first that distributive justice mediates the relationship between perceived service quality and post-complaint satisfaction, suggesting that a patient who perceives that the service is fair and good quality develops a positive satisfaction. Perceived service quality is therefore essential for the development of a fair treatment [15].

Second, the results of these tests showed that procedural justice also mediates the relationship between perceived service quality and post-complaint satisfaction. This result indicates that the procedures and decisions taken according to complaint type, complaint response time, simplicity and efficiency of the complaint process allow the clinic to present a good service quality and thus satisfy its patients. Finally, the results of these tests also indicate that interactional justice does not mediate the relationship between perceived service quality and post-complaint satisfaction [16].

In summary, perceived justice has a partial mediation role between perceived service quality and post-complaint satisfaction. In order to test the moderating effect of perceived responsibility on the relationship between perceived quality and perceived justice, we start by identifying two groups: The first group is made up of patients who think that the clinic has a low responsibility towards the problem encountered. This group, which consists of 152 respondents (patients), is named "low responsibility". The second group, named "strong responsibility", is made up of 198 respondents and includes the patients who think that the clinic has a strong responsibility towards the

problem encountered. Examining the difference of $\chi^2$ between the two groups, we found that it is significant at p<.001. Therefore, we can conclude that perceived responsibility moderates the relationship between perceived quality and perceived justice dimensions (Table 4).

**Table 4:** Test of the moderating effect of perceived responsibility (*i.e.*, verification of the moderating effect of perceived responsibility on the relationship between perceived quality and perceived justice).

| Model | df | CMIN | p | NFI | IFI | RFI | TLI |
|---|---|---|---|---|---|---|---|
| | 19 | 66.151 | <.001 | 0.1 | 0.1 | 0.002 | 0.002 |

**Note:** CMIN: minimum discrepancy; df: degrees of freedom; NFI: Normed Fit Index; IFI: Incremental Fil Index; RFI: Relative Fit Index; TLI: Tucker Lewis Index.

To confirm that perceived responsibility moderates the relationship between perceived quality and perceived justice dimensions, we have to consider whether the nature and strength of the relationship varies from one group to another (Table 5) [17].

**Table 5:** Test of the moderating effect of perceived responsibility (*i.e.*, verification of the moderating effect of perceived responsibility on the relationship between elements of perceived justice and post-complaint satisfaction).

| Model | df | CMIN | p | NFI | IFI | RFI | TLI |
|---|---|---|---|---|---|---|---|
| | 16 | 57.808 | <.001 | 0.009 | 0.01 | 0.015 | 0.015 |

**Note:** CMIN: minimum discrepancy; df: degrees of freedom; NFI: Normed Fit Index; IFI: Incremental Fil Index; RFI: Relative Fit Index; TLI: Tucker Lewis Index.

The results indicate that perceived responsibility moderates the relationship between perceived quality and perceived justice and confirm hypotheses $H_{5.1}$, $H_{5.2}$, and $H_{5.3}$. Whatever is the relationship (weak or strong) between perceived quality and perceived justice dimensions, responsibility of the clinic is always strong and important. The moderating role of perceived responsibility affects perceived justice vis-à-vis service quality.

The results underline the importance of clinic responsibility management, as perceived by the patient, as it could moderate the relationship between service quality and distributive justice ($\lambda_1$=0.826, $\lambda_2$=0.778), procedural justice ($\lambda_1$=0.875, $\lambda_2$=0.774) and interactional justice ($\lambda_1$=0.965, $\lambda_2$=0.961). The relationship between perceived quality and interactional justice is stronger than the others ($\lambda_1$=0.965, $\lambda_2$=0.961).

We also checked whether perceived liability moderates the relationship between perceived justice dimensions and post-complaint satisfaction. Then, we tested the stability of the model across the groups. We found that the difference in $\chi^2$ is significant at p<.001, which means that responsibility moderates the relationship between perceived justice dimensions and post-complaint satisfaction [18].

We will finish our analysis by identifying the relationships that in our causal model are affected by this variable. The results indicate that perceived responsibility moderates the relationship between perceived justice and post-complaint satisfaction and confirm hypotheses $H_{6.1}$, $H_{6.2}$ and $H_{6.3}$. The results also indicate that if the clinic has a weak responsibility, the relationship between interactional justice and post-complaint satisfaction is significant. However, if the clinic has a strong responsibility, this relationship is not important and it is not significant. The following table also indicates that whether responsibility is weak or strong, the relationship between procedural justice and post-complaint satisfaction is stronger than other relationships ($\lambda_1$=0.638, $\lambda_2$=0.737). These results corroborate those of Smith et al., who found a link between responsibility attribution, perceived justice and satisfaction with compensation granted, and those of Sabadie et al., who shows that the complaint action assumes that the customer attributes all or part of the responsibility for his dissatisfaction to the service provider (Table 6) [19].

**Table 6:** A multi-group analysis of the moderating effect of perceived responsibility on the relationship between perceived justice dimensions and post-complaint satisfaction.

| Relationships | Weak responsibility | | | Strong responsibility | | |
|---|---|---|---|---|---|---|
| | λ | Cr | p | λ | Cr | p |
| Post-complaint | 0.317 | 5.21 | <.001 | 0.258 | 4.82 | <.001 |

| | | | | | | |
|---|---|---|---|---|---|---|
| satisfaction ← Distributive justice | | | | | | |
| Post-complaint satisfaction ← Interactional justice | 0.285 | 4.513 | <.001 | 0.053 | 1.008 | 0.314 |
| Post complaint satisfaction ← Procedural justice | 0.638 | 7.818 | <.001 | 0.737 | 7.366 | <.001 |

As for the moderating effects, we have been able to show that perceived responsibility moderates the relationship between perceived service quality and perceived justice dimensions, *i.e.* the responsibility of the clinic, as perceived by the patient, could moderate the relationship between service quality and perceived justice. Worth noting is that the results of these tests are contributions in themselves since to our knowledge no study has been interested in examining these effects.

The results also showed that perceived responsibility moderates the relationship between perceived justice and post-complaint satisfaction. That is, in complaint management, the clinic should observe the perception of justice in order to satisfy its patients [20].

# CONCLUSION

## Theoretical contributions

Our first contribution consists in confirming the important role of justice theory and its three dimensions, the distributive, procedural and interactional, to customer complaint processing. Through a review of the literature, we have shown that most studies consider perceived justice as a factor explaining satisfaction with a purchase, a consumption or a complaint experience. This post-complaint satisfaction essentially mediates the relationship between perceived justice and the results of complaint processing.

Our second contribution amounts to integrating responsibility as a moderating variable between perceived justice and post-complaint satisfaction and between service quality and perceived justice.

By looking for the causes of service failure, this variable moderates the relationship between quality and post-complaint satisfaction. It is a variable that explains customer reactions to dissatisfaction. Indeed, Sabadie et al. show that post-complaint satisfaction has a global impact regardless of the level of perceived corporate responsibility.

## Management implications

In this study, we tried to enlighten healthcare professionals on the importance of managing complaints with justice and prudence, because patient relationship management strategy seems a priority for the development of patient satisfaction and trust, therefore the profitability of the establishment. Treating complaints fairly is a way for the institution to create competitive advantages by compensating customers their due rights. Indeed, each complaint is an opportunity to improve the company's functioning. It is in a sense a potential source of "intelligent marketing ", *i.e.*, information that can be used for marketing decision-making.

After confirming the moderating effect of responsibility on the relationship between perceived quality and perceived justice and the relationship between perceived justice and post-complaint satisfaction, the clinic has to address the problem of perceived responsibility with much care, and train staff in contact to determine with patients' responsibility level. This should encourage setting up complaint management programs. It is therefore necessary to determine the responsibility of the clinic in the eyes of patients. Finally, the company should care about limiting the impact of service malfunction by showing a real desire to restore trust.

# LIMITATIONS

Despite the various contributions cited earlier, this study has a number of limitations that can be considered and improved in future research. We mention namely:

- We did not take into account some variables that could have contributed to explaining more post-complaint behavior like emotions or revenge. In order to avoid ending up with a complex model, we limited ourselves to the most relevant variables.
- We limited our study to private health institutions located in the Greater Tunis area. This my raise the problem of generalizing our results. In order to remedy this problem, it would be interesting to extend the scope of our study to other cities and apply it to other sectors such as hotels, insurance ...etc.

# CONFLICT OF INTEREST

The authors declare no conflict of interest.

# FUNDING

This research received no external funding.

## ACKNOWLEDGMENTS

We would like to thank all the persons for their effort and time in helping us finish the manuscript.

## REFERENCESS

1. Adams JS. Towards an understanding of inequity. J Abno Soc Psychol. 1963;67:422-436.
2. Adams JS. Inequity In Social Exchange. In L. Berkowitz (Ed.), Adv Exp Social Psychol. 1965;2:267-299.
3. Andaleeb SS, Basu AK. Technical complexity and consumer knowledge as moderators of service quality evaluation in the automobile service industry. J Retail. 1994;70(4):367-381.
4. Arias MI, Maçada ACG. Judiciaries' modernisation through electronic lawsuits: Employees' perceptions from the Brazil and Argentina federal justice services. Inform Develop. 1964;37(2): 258-273.
5. Aurier P, Siadou-Martin B. Perceived justice and consumption experience evaluations. Int J Serv Ind Manag. 2007;18:450-471.
6. Baron R, Kenny D. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. J Personal Soc Psychol. 1969;51:1173-1182.
7. Bell SJ, Mengüç B, Stefani SL. When customers disappoint: A model of relational internal marketing and customer complaints. J Acad Market Sci. 2004;32:112-126.
8. Berens G, van Riel CBM, van bruggen GH. Corporate Associations and Consumer Product Responses: The Moderating Role of Corporate Brand Dominance. J Market. 1994;69:35-48.
9. Bergel M, Brock C. The impact of switching costs on customer complaint behavior and service recovery evaluation. J Serv Theory Pract. 2018;28:458-483.
10. Bies RJ, Shapiro DL. Interactional fairness judgments: The influence of causal accounts. Soc Just Res. 1996;1:199-218.
11. Bitner MJ, Booms BH, Mohr LA. Critical Service Encounters: The Employee's Viewpoint. J Market. 2004;58:95-106.
12. Bitner MJ, Booms BH, Tetreault MS. The Service Encounter: Diagnosing Favorable and Unfavorable Incidents. J Marketing. 1995;54:71-84.
13. Blodgett JG, Tax SS. The effects of distributive and interactional justice on complainants' repatronage intentions and negative word-of-mouth intentions. J Con Satis Dis Comp Behav. 1994;6:100-110.
14. Bolton RN, Drew JH. A Longitudinal Analysis of the Impact of Service Changes on Customer Attitudes. J Market. 1993;55:1-9.
15. Bowen DE, Gilliland SW, Folger R. HRM and service fairness: How being fair with employees spills over to customers. Organ Dyn. 2003;27:7-23.
16. Brady MK, Cronin JJ. Some New Thoughts on Conceptualizing Perceived Service Quality: A Hierarchical Approach. J Market. 1998;65:34-49.
17. Calof J. Reflections on the Canadian Government in competitive intelligence programs and impacts. Foresight. 2007;19:31-47.
18. Chebat JC, Davidow M, Codjovi I. Silent Voices: Why Some Dissatisfied Consumers Fail to Complain. J Serv Res. 2005;7:328-342.
19. Choi S, Mattila AS. Perceived controllability and service expectations: Influences on customer reactions following service failure. J Bus Res. 2005 61:24-30.
20. Churchill GA. A Paradigm for Developing Better Measures of Marketing Constructs. J Market Res. 2007;16:64-73.