THE ROLE OF PERCEIVED JUSTICE WITH SERVICE RECOVERY IN THE REALTIONSHIP BETWEEN EMPOWREMENT OF FRONTLINE EMPLOYESS AND CUSTOMER SATISFACTION AFTER SERVICE RECOVERY" CUSTOMERS OF EGYPTIAN INTERNET COMPANIES CASE STUDY

Attia Abd Elkader Attia Ali

Ahmed Abd El-Reheem Ahmed Mohamed

ABSTRACT

Considered Service failure, service recovery strategies, and customer evaluation of this recovery (perceived justice) from topics that have gained much attention from many studies, although these studies have made significant contributions to the handling and service recovery, additional and renewed scientific research is still needed in this field. This study aimed to investigate the relationship between empowerment of frontline employees and customer satisfaction after service recovery with the mediating effect of perceived justice with service recovery. All customers of internet companies in Egypt represent the population for this study. A sample of this study consisted of (400) internet companies' customers. The questionnaire lists were used to collect the data after testing the validity and reliability. Descriptive statistics, simple linear regression, multiple linear regressions, and some methods of testing hypotheses were used in analyzing the data. The finding of the study showed that there was a positive significant relationship between the empowerment of frontline employees and customer satisfaction after service recovery. Also, there was a positive significant relationship between perceived Justice with service recovery and customer satisfaction after service recovery. In addition to that, it was also founded that Perceived Justice with service recovery has a mediating effect on the relationship between the empowerment of frontline employees and customer satisfaction after service recovery. Based on these results was presented a set of recommendations, as well as suggest some future studies relevant to the subject of the study.

Keywords: perceived justice, customer satisfaction after recovery, empowerment of front line employee, service recovery

1.   INTRODUCTION:

Nowadays, in the face of global competition, companies have tended to take care of customers and knowing about their wants and desire, trying to satisfy them and keep them as customers for life, these organizations are exerting its maximum material, human and information capabilities to achieve those goals. Now the customers are become powerful and influential, where every change in any company begins with the customers and ends with the customers, so there will be no profits or revenue without the customer , there will be no market value for the company (Gupta, Lehmann& Stuart, 2004). Despite the efforts made by companies to satisfy their customers, they may not succeed in meeting all the requirements and desires of customers especially in the field of services, where companies find it difficult to provide a service without errors or deficiencies on continuously and find it difficult to conduct all service meetings according to for the pre-set plan, this is due to the nature of the service is intangible, production and consumption at the same time, that increase the chances of failures and shortcomings in the service provided (Nadiri and Tanova, 2016).

 Errors or deficiencies in the service provided lead to a gap between the previous customer expectations as to the service they will receive and the actual performance they have received from the company, this creates a sense of inequity and injustice in the exchange process, leading to an increase in the level of dissatisfaction (Sabharwal & Soch, 2011;Siagian & Triyowati, 2015). Due to the difficulty of preventing the occurrence of service failure or avoiding all errors in the services field, companies must be able to respond to this failure through speedy service repair and take all necessary measures to handle this failure, because the success of these procedures and company efforts in handling of service failures, and customer awareness of the process fairness of handling this failure (perceived justice) may lead to restoring customer satisfaction to its previous levels before the failure occurred, Consequently, it increases the chances of retaining them, while the company's failure to handle the service failure may have more negative effects and consequences than the failure itself, because the customer's dissatisfaction in the event that the company fails to handle the service failure is much greater than the dissatisfaction arising from the failure itself (Morrisson & Huppertz, 2010;Smith, Bolton & Wagner, 1999; Fisk *et al.*, 2011).

Front-line employees play a significant role in dealing with service failures because they communicate directly with the customer, but usually face extreme constraints regarding the procedures and policies of the company to handle service failures, Where they have to comply with the rules developed by companies for dealing with customers which reduce the ability of employees to handle service failures and thus find it difficult to satisfy customers Nadiri & Tanova, (2016), For this reason, companies seeking efficiency in the process of handling service failure should give employees an adequate degree of independence in making decisions that allow them to respond quickly when service failures occur and handle them in a manner that contributes to customer satisfaction (Hoffman, Kelley & Rotalsky, 2016). The internet sector is one of the most sectors that suffer from a failure in the service provided, and this failure takes several forms such as failure in the core service itself or complementary services, and failure in the process of providing the service, and this failure usually entails many financial and psychological losses for consumers, which have a negative effect on consumer satisfaction and raise the chances of negative behavior against the service provider, especially, if the organization fails to respond to this failure and fails to implement successful strategies for recovering the service and handling its errors (Zhu, Sivakumar &Parasuraman, 2004).

Considered Service failure, service recovery strategies, and customer evaluation of this recovery (perceived justice) from topics that have gained much attention from many studies (e.g. McCollough and Bharadwaj, 1992; Dasu and Rao, 1999; Boshoff, 1999; Kerr, 2004), although these studies have made significant contributions to the handling and recovery of service after failure, additional and renewed scientific research is still needed in this field, especially in light of the growing service sector in the economies of different countries around the world, and the continuous development of technology and marketing and customer service (Zhu et al., 2004). Despite increasing interest in the topic of service recovery most studies were carried out in the foreign environment (e.g Villi and Koc, 2018; Proenca, Torres and Sampaio, 2017; Harun *et al.*, 2018;Gohary, Hamzelu and Alizadeh, 2016;Kwon and Jang, 2012;Wang *et al.*, 2011), There is a noticeable shortage of such studies in the Arab environment especially in Egypt, and given that effective handling of service failures helps to restore a balance between customer expectations and perceptions, and these expectations and perceptions differ in different cultures, where the cultural background influences customers evaluation of the service quality and their behaviors towards filing a complaint, and their perceptions of service failure and recovery Hoffman, Kelley & Rotalsky, (2016), This is illustrated by the recommendations of a recent study (Tsao, 2018), which emphasized the need to evaluate the process of service failure handling in different cultures, due to the difference in individual perceptions about their assessment of the fairness of efforts to handle failure from one culture to another. From the above, dealing with the process of handling service failure in an Arab environment may be an addition to the related literature in this topic, this is what the current study will do, which will address the role of perceived justice with service recovery as mediator variable in the relationship between front-line staff empowerment and customer satisfaction after service recovery in the Egyptian environment, where such mediation has not been discussed in any of the studies whether Arab or foreign.

2. LITERATURE REVIEW:

Service failure provided is unavoidable, even despite the measures which service providers have taken to avoid such failures, they cannot avoid all failures in the services they provide to customers (Wang *et al.*, 2011). Many service organizations have failed to adopt the model of Zero defects because of the distinctive features of the service, such as the intangible and the high dependency of the service delivery mechanism on the human element, which has achieved great success in the industry. Because the performance levels vary from one employee to another and can differ from time to time with the same employee, in addition to the correlation feature represented in the difficulty of separating the time of production of the service and the time of its consumption, which requires the presence of the customer and its impact on the level of the service provided. Due to the difficulty of avoiding service failure and providing it without mistakes and defects from the first time, it became necessary for companies to adopt effective strategies to the handling of service failure and mitigate its impact on customer satisfaction (del Río-Lanza et al, 2009; Prasongsukarn & Patterson, 2012).

There are also many controversial issues relating to service failure and recovery, which are still highly disputed among researchers. The most important of which is the effect of both service failure and recovery and perceived justice on customer satisfaction. Where a study Nikbin *et al.*, (2015) indicated that successful handling of service failure is not equal to service free of failure or defects, the organization that seeks to achieve a high level of customer satisfaction must provide services free of defects and errors, and some studies agree with it (e.g Siagian and Triyowati, 2015; Singh & Crisafulli, 2016;Weun, Beatty &Jones, 2004) that confirmed that the occurrence of a major service failure or mistake adversely affects customer satisfaction, and even after handling this failure, satisfaction rates remain low. While some other studies do not agree with this (De Matos et al, 2007; Rungting and Ke, 2009) Which indicates that customer awareness of the fairness of the efforts made by the company in handling of service failure leads to greater levels of customer satisfaction than the customer's satisfaction with service that has been free of defects and errors. Another controversial issue is the impact of front line employee's empowerment on customer satisfaction after service recovery, where a study Ashill, Krisjanous & Carruthers, (2004) indicated that success in handling service failures and achieving customer satisfaction depends primarily on the financial and tangible compensation provided by the company to customers as compensation for the loss caused to them by service failure, more than the behavior and attitudes of front-line employees when handling customer complaints, this differs with the results of some studies (Weng, 2009; Lin, 2009) that emphasized the prominent role front-line employees play in maintaining customer satisfaction after a service failure has occurred, as these studies have found that empowering employees for the process of handling a service failure contributes to raise the levels of customer satisfaction.

There is a gap between the previous studies on the dimensions of perceived justice and the extent of its effect on both customers satisfaction after service recovery. As some studies have concluded that distributive justice is the most common dimension of perceived impact on customer satisfaction (Migacz et al., 2018; Siu et al., 2013) and some other studies have concluded that both interactional and procedural justice. It has a large impact on customer satisfaction (H. Lin et al., 2011; Wang et al., 2011). The focus of previous studies related to the service recovery on the application in some sectors such as restaurants, hotels, banks, airlines, telecommunications, has given rise to an opportunity to research the service recovery in other sectors, such as the Internet industry.

2.1 EMPOWERMENT OF FRONT-LINE EMPLOYEES:

The concept of service recovery in the context of services first appeared in the British Airways campaign, which that was its content "putting the customer first Kanousi, (2005), and Kunz and Hogreve, (2011) mentioned that the issue of handling customers complaints and what follows from service recovery one of the main research topics in the marketing field, which needs to be dealt with more than researchers and given the importance of the topic we note a clear increase in studies that handling of service failures in recent years, this is due to the difficulty of providing a service free of defects and mistakes from the first time and applying the model (zero defects) in the field of services, this made companies seeking to achieve a competitive advantage change the way they think instead of wasting time and effort in trying to prevent failure altogether, and focus its

efforts and energies to adopt effective service recovery strategies and mitigate its impact on customer satisfaction Hoffman and Bateson, (2010), and the study Andreassen, (2000) indicated that the service recovery process is represented in all actions taken by the organization to convert the state of dissatisfaction formed with customers due to the failure of the service delivery process to a state of satisfaction and ensure their stay in the organization, while the Kau and Loh, (2006) study indicated that the service recovery is meant to be "a set of procedures taken by the service provider to handle the complaint of the customer relating to the service failure received, and also the Harun *et al.*, (2018) study also described it as "all the organization's efforts to reduce the negative effects of service failure and maintain customer satisfaction, the success of the service recovery process depends on a set of factors, the most important of which is to enable empowerment front-line employees directly with the customers and give them all powers to handle of failure in the service provided, also Ashill, Krisjanous and Carruthers, (2004) also defined empowering front-line employees providing the necessary authority for front-line employees to provide quick reactions to recover the service and retain customer satisfaction, also empowerment also indicates the amount of authority and resources granted to employees and the decisions they are permitted to make (Villi & Koc, 2018).

In this regard, the Weng, (2009) study indicated the importance of front-line employees empowerment to achieve an effective response to service failure and recovery, since it concluded that all failures were handled effectively when the service employee had the full capacity and authority to solve these problems without referring the customer to another employee, the study made many suggestions, the most important of which was the need for service organizations to empower front-line employees by providing them with the necessary authority to take effective decisions to deal with service failures and to achieve customer satisfaction, the Lin, (2009) study is in line with the findings of the previous study, where it highlighted the important role front-line employees play in the success of the service recovery process, as the study concluded that whenever the service staff-directly connected to the customer-have a high knowledge of organizational empowerment initiatives their self-efficacy increases and becomes more effective in restoring the service, and in the event of errors in the service delivery process, providing the employees with the necessary and impartial authority to make decisions concerning their field of work enables them to respond quickly to customer complaints and to take effective and practical steps to recover the service after failure. The study Villi and Koc, (2018) indicated that the behavior and attitudes of service employees directly affect the service recovery process, the positive behavior of employees and the method of good dealing with the customers when receiving and handling of complaints, positively impacts consumers perception of the service recovery and their satisfaction and behavioral intent towards the company, while negative attitudes of service providers harm the company's performance in recovering services, and several studies have indicated in the context of testing the relationship between the empowerment of front-line employees and customer satisfaction after service failures and recovery (e.g.Boshoff, 1999;Villi and Koc, 2018; Proenca, Torres and Sampaio, 2017;McQuilken, 2010; Liao, 2007) to the existence of a positive significant relationship between empowering employees and giving them the authority necessary to recover the service and customer satisfaction after service failure and recovery, so whenever the employee can solve the customer's problem quickly and without referring to the manager the levels of customer satisfaction with the service recovery process will rise, and the company increases the chances of preserving them and in return the levels of customer dissatisfaction increase if the complaint is passed from one employee to another to handle the deficiency of service, which negatively reflects on their behavioral intentions towards the company, starting from the negative spoken word until reaching the shift with another service provider.

2.2 PERCEIVED JUSTICE WITH SERVICE RECOVERY:

Studies concerning the customer evaluation process for the service recovery are based on the theory of justice Rawls, (2009), which indicates that the process of evaluating customers for the process of handling service failure (service recovery) is carried out with their awareness of the fairness of the company's efforts to service recovery, which in turn affect customer satisfaction, in addition to the justice theory which assumes justice depends on the speed of the company's response to service recovery and who is responsible for the failure, once customers realize that the company will respond quickly to the complaint and handle service failure, and punish those responsible for the failure, this allows customers to adopt positive behavior to towards the company Kwon and Jang, (2012), but providing customers a successful service recovery makes them feel the fairness of the social exchange process, and thus their satisfaction rates return to their normal and right state and increase their loyalty to the company (Hess Jr et al., 2003). As also De Matos, Vieira and Veiga, (2012) described the Perceived justice is as an evaluation by the consumer of the degree of justice received in the service recovery process or a perceptive comparison made by the consumer between the loss he incurred as a result of a service failure and what he received from the company as compensation for that failure, and the perceived justice consists of three main dimensions as follows:

2.2.1 DISTRIBUTIVE JUSTICE:

Distributive justice is related to the actual and tangible results obtained by the customer from the service recovery process, it indicates the awareness of the customer of the fairness of the solution (results) provided by the company to deal with the service failure Bakar, (2017), on the other hand distributive justice refers to the provision by the companies of some tangible resources to design and compensate for service failures such as (refunding money, changing service, buying discounts in the future), which affects the level of customer satisfaction with service recovery Bugg Holloway et al, (2009), as described by Nguyen et al, (2012) as output fairness is an estimation of the benefits received compared to the costs and contributions made (time, effort, money), this focuses on the outputs of the service recovery process (compensation and replacement), input comparison (time, effort, money) during recovery process, and providing adequate compensation to Internet users immediately following service breakdowns such as internet service breakdowns or slow internet speed, or the presence of some customer-specific problems will have a positive impact on their confidence in the company, and their sense of satisfaction (Singh and Crisafulli, 2016; Harun *et al.*, 2018), and also Michel, Bowen & Johnston, (2009) Concluded that the most successful service recovery approaches are the quick response to service failure combined with the return of all payments made by money customers, in addition to other simple

money as compensation for the problems they faced, and emphasized that customer satisfaction increases with the increase for payment provided to them, and that financial compensation has the greatest role in restoring the customer's feeling of satisfaction through exchanging positive relations between the company and customers through the customer's sense of loss because of service failure.

2.2.2 PROCEDURAL JUSTICE:

It demonstrates customer awareness of the fairness of the company's policies and procedures in dealing with service failures, so that every time the procedures followed in dealing with service failures are equal for customers, it leads to achieving high levels of customer's satisfaction Ellyawati et al, (2012), that means it focuses on the method used to handling customer complaints, the quick response of the company to failures and their handling and the flexibility and efficiency of the procedures followed in the process of service recovery Singh & Crisafulli, (2016). Procedural justice is also defined as the "methods used by the company to deal with problems occurring during the provision of services and to handling these problems; including (accessibility, timing, speed, process control, delay, flexibility, and adaptation to the processing needs of customers) Homburg and Fürst, (2005), where procedural justice can be measured by multiple variables such as response time, waiting time, policy and procedural flexibility speed of handling process, making handling process as quick and simple as possible, procedures and policies used to return the money (De Matos et al, 2007). many studies confirm that five components must be made available to achieve procedural justice when handling service failures such: Providing the customer enough information about the cause of this failure, giving the company value to the customer's point of view, impartial and professional continuing feedback after the company handling of the failure, extending these principles to both consumers and the company. Marketing services research have used 'procedural justice to measure 'equity', besides, procedural justice was used to measure the customer's opportunity to participate in the process by presenting feedback (Wirtz & Mattila, 2004).

2.2.3 INTERACTIONAL JUSTICE:

Interactional justice is an extension of the concept of procedural justice relating to the human aspect of any customer-company transaction, representing how much fairness the consumer has in the human handling of the company or in the execution of procedures Huang, (2011), It also relates to the behavior of the service provider towards the customer during the service recovery process, and Ellyawati et al, (2012) notes that interactional justice is "the level of customer awareness of service providers behavior during their interactions with customers to solve problems related to service failure, also shows how front-line employees are handled when dealing with customer complaints regarding the quality and efficiency of communication and interaction between front-line employees and customers (Gohary, Hamzelu & Alizadeh, 2016). Interactional justice includes two forms of justice: justice in personal relationships, and information justice. the justice of personal relationships reflects the degree to which the company interacts with consumers with integrity and appreciation, as for the justice of information it focuses on the explanations provided to customers by communicating the necessary information about the occurrence of the failure or error or on the use of certain procedures or a specific method to handle this failure or error, information justice is of a large importance in achieving customer satisfaction even lacking of compensation, the customer can be satisfied if accurate, reasonable and honest information relating to the reasons for the service failure is provided, that is information justice refers to the appropriateness and accuracy of the information available in the process of handling the failures, while personal justice represents the degree of responsiveness and concern exhibited by service providers during the failure process (Balaji, Roy and Quazi, 2017; Nguyen et al, 2012).

In the context of examining the relationship between perceived justice and customer satisfaction after service failure and recovery, some studies have aimed (e.g. Lin,Wang &Chang, 2011; Prasongsukarn & Patterson, 2012; Kuo and Wu, 2012; Nefat, Belazić & Alerić, 2012;Balaji, Roy & Quazi, 2017;Migacz, Zou and Petrick, 2018) to identify the nature of the relationship between the customer's evaluation of the process of handling service failure (perceived justice) and customer satisfaction and post-handling behaviors, it found a direct and indirect positive relationship between perceived justice and customer satisfaction after service failure and recovery, Whenever the customers realize that they have obtained a fair handling for service failure, the higher their levels of satisfaction, and the greater the chances of their recurrence dealing with the company itself, in addition to the positive recommendation on the company to others, and as for the indirect relationship between the two variables, it is done through mediation of positive and negative emotions that the customer has towards recovery service.

2.3 CUSTOMER SATISFACTION AFTER SERVICE RECOVERY:

In recent years, due to changing market mechanisms and the competitive environment, the concept of customer satisfaction has become the main focus of marketing strategies Cahill, (2006), and that most markets around the world are suffering from a recession that adversely reflects the possibility of attracting new consumers, and that the value of customer satisfaction emerges from its direct impact on the profitability of companies and their continuity and market survival, because a satisfied customer may continue his dealings and relationship with the company, which brings about significant economic gains to it, which is increased profitability and market share (Hoffman, Kelley & Rotalsky, 2016). overall satisfaction can be described as the customer's sense of comparison between the characteristics of the service that he has already obtained and his previous expectations for it, and satisfaction is achieved when performance is actual is greater or equal to customer expectations Oliver, Rust &Varki, (1997), also study Maxham & Netemeyer, (2002) defines customer satisfaction as the positive feeling that a customer has about all his previous dealings with the company in addition to the satisfaction resulting from the last trade exchange. As for the satisfaction of the customer after service failure and recovery, it is described Hess et al, (2003) as an emotional and psychological state formed by the customer as a result of a comparison between the actual efforts made by the company to recover the service and its previous expectations of those efforts, and the satisfaction after service recovery is limited

to the satisfaction of the customer with the corrective action taken by the company to recover the service, thus differ from the overall satisfaction of the customer with the company and differ from the satisfaction arising from the failure of the service provided (Ghalandari, 2013).

Tsai, (2004) defined it as the effective positive situation resulting from the performance evaluation based on the customer's previous experiences and the consumption experiences of the product or service. Kotler & Armstrong, (2006) define customer satisfaction as the customer or person's feeling of joy or disappointment resulting from comparing the perceived performance of the product with its expectations. In the same context Kotler et al., (2012) see it as 'the customer's feeling of happiness and joy because of comparing product performance with his or her prior expectations, customer satisfaction is high if the performance of the product matches or exceeds the expectations . Al-Alak, (2009) defined it as a positive feeling that the customer feels because of receiving a level of service that exceeds his sacrifices to receive the service. Zeithaml et al., (2003) defined it as the number of desires that the service fulfilled and satisfied the customer with.

The occurrence of a service failure impacts negatively on customer satisfaction, as the Reichheld & Sasser, (1990) study concluded that companies annually lose an average of 15 to 20 of their customers due to a service failure, as the occurrence of a failure reduces the levels of customer satisfaction, and failure of the company in recovering the service has more negative consequences than the failure itself such as the customer's transformation to deal with another company, and the customer tends to speak negatively about the company in front of others (the negative spoken word) which may lose the company to some of its potential customers, that is why most companies are beginning to look for effective strategies that allow them to recover the service effectively and increase the sense of fairness of the customer in the exchange process, thus returning loyalty to their previous position before the failure occurred. the study of Smith et al, (1999) identified the most important of these strategies: the initiative to reform the service even before the customer filed the complaint, the speed of responding to complaints and quickly handling the service failure, providing the customers an apology and a convincing explanation of the reason for the failure, and providing tangible financial compensation the customers on the material damage that they are exposed to as a result of the service failure, as following these combined strategies or some of them helps reduce the customer's dissatisfaction.

3.   RESEARCH METHODOLGY:

The research curriculum includes the following components:

3.1   STUDY HYPOTHESES AND MODEL:

The current research is based on a series of main hypotheses, these hypotheses have been formulated in the light of the findings of previous studies and their suggestions, taking into account the aims of the current study, the hypotheses have been formulated as follows:

H1: This hypothesis aims to investigate the impact of empowerment of front-line employees as an independent variable on customer satisfaction after service recovery as a dependent variable and this hypothesis were based on the results of some studies (e.g.Boshoff, 1999;Liao, 2007; McQuilken, 2010; Proenca, Torres & Sampaio, 2017;Villi and Koc, 2018), based on the above, the hypothesis states that: there is a statistically positive correlation between front-line staff empowerment and customer satisfaction after service recovery . H2: This hypothesis aims to investigate the impact of front-line employees empowerment as an independent variable on the perceived justice as a dependent variable, and the results of some previous studies underpin this hypothesis (e.g.Fisk *et al.*, 2011;Nadiri & Tanova, 2016; Hoffman, Kelley & Rotalsky, 2016), based on the above, the hypothesis states that: there is a statistically positive correlation between the empowerment of front-line employees as independent variable and perceived justice (distributive, procedural, interactional) as a dependent variable. H3**:** This hypothesis aims to investigate the impact of perceived justice as a mediator variable on customer satisfaction as a dependent variable after service recovery, and this hypothesis is based on the results of some previous studies (e.g.Prasongsukarn & Patterson, 2012;Nefat, Belazić &Alerić, 2012;Gohary, Hamzelu & Alizadeh, 2016;Singh & Crisafulli, 2016; Tsao, 2018), based on the above, the hypothesis states that: there is a statistically positive correlation between perceived justice (distributive, procedural, and interactional) as a mediator variable and customer satisfaction after service recovery. H4: This hypothesis aims to investigate the role of perceived justice with service recovery as a mediator variable in the relationship between the front-line employee's empowerment and customer satisfaction after service recovery, this mediation has not been examined before, but this hypothesis was based on findings from previous studies, including studies, which founded direct relations between these variables (Fisk *et al.*, 2011;Nadiri and Tanova, 2016), Which indicates the prominent role that front-line employees empowerment plays in influencing customer evaluation to handle service failure (perceived justice), and studies (e.g.Nefat, Belazić & Alerić, 2012;Gohary et al, 2016;Singh & Crisafulli, 2016;Tsao, 2018), That concluded that there was a positive correlation relationship between perceived justice with service recovery and customer satisfaction after service recovery, this hypothesis was also based on the justice theory, and the theory of social exchange and based on the above, the hypothesis states that: Perceived justice with service recovery (distributive, procedural, interactional) as a mediator variable affects the relationship between front-line employees empowerment and customer satisfaction after service recovery.
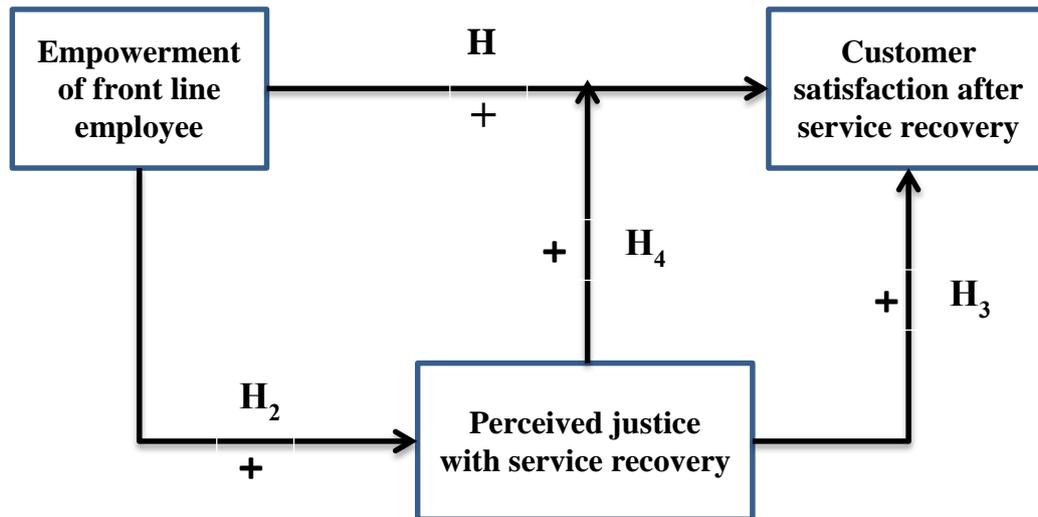
Research model

3.2 SAMPLE AND DATA COLLECTION:

The study population is made up of people who use the internet in Egypt. As where four major companies offer customers Internet services in Egypt (We, Vodafone Egypt, Orange Egypt, Telecom Egypt). The random sampling method was applied to reach people who using internet service. It has taken a sample of 400 people in Egypt that that uses internet service. The survey was carried out in Egypt by males and females. Data were collected using the questionnaire. Where a series of questionnaires were electronically distributed and the other was directly distributed to individuals, the questionnaire has been posted several times on Twitter and LinkedIn and shared on websites such as WhatsApp and Snapchat and Facebook. Incomplete questionnaires and non-Egyptian internet users have been excluded. A total of 420 surveys were collected and 400 were finally examined in this research, where (20) questionnaires were excluded. As a result, the response rate was 95% and the study model was statistically tested using this sample of 400 respondents who use an internet service.

3.3 DATA COLLECTION INSTRUMENT (MEASURES):

In this study, the variables were measured using a Likert scale of five points ranging from "strongly agree" (5) to "strongly disagree" (1). For this study measurement items were selected from well-established scales that have been previously valid and reliable. As described in the literature review, the measuring objects selected reflect the main facets for each construct. Measurement items from the existing scales found in relevant marketing literature have been adapted. empowerment of frontline employee variable was measured by using (4) items adapted from (Nadiri & Tanova, 2016;Boshoff, 1999). The researcher made some formulation adjustments based on the study environment. Measured perceived justice with service recovery by using (14) items adapted by (Smith et al, 1999; Ellyawati et al, 2012), where measured distributive justice variable by (4) items, and procedural justice by (4) items , measured and interactional justice by (6) items. Depending on the study environment, the researcher has made some formulation adjustments. measured customer satisfaction after service recovery by using 4 items adapted by (Varela-Neira et al, 2010). The questionnaire was available in Arabic and English. Although reliable and validated measures were used by the researcher to measure study variables, reliability and validity tests of study variables were necessary to ensure that the items used to measure study variables are appropriate before they were distributed among the respondents. In 80 survey lists, the researcher used the Alpha Cronbach method to carry out the validity of the survey, which is a very good measurement of the validity and reliability. In addition to the descriptive data analysis for the sample characteristics, the data were analyzed via the computer, and the statistical analysis was done using a program (SPSS 23) in which hypotheses were tested using a simple analysis of regression and multiple linear regression analyzes using a stepwise regression method, as we can see in the table (1) the validity and reliability of questionnaire list.

Table (1): The validity and reliability of questionnaire list

Research instrument	Pearson correlation	Cronbach's alpha
EMPOWERMENT OF FRONT-LINE EMPLOYEES		.749
To me, it's important that the person I complain about can solve my problem.	.682	

It irritates me when someone I complain about has to find someone else to solve my problem.	.762	
I get angry when a complaint is forwarded from one employee to the next.	.712	
I believe that the customer service employee has complete authority to solve my question.	. 758	
PERCEIVED JUSTICE WITH SERVICE RECOVERY		.875
distributive justice		.773
The result that I obtained was fair.	.726	
I don't think I got what I deserved.	.681	
The company gave me what I needed to solve the problem.	.732	
In the light of the circumstances, I feel that the company has offered adequate compensation.	.785	
procedural justice		.896
I think my problem has been sorted out in the right way.	.829	
I think the company has good strategies and procedures for problem-solving.	.810	
Customer service has shown sufficient flexibility in handling my problem.	.865	
Customer service (company) worked to solve the problem as soon as possible.	.837	
interactional justice		.803
Employees were properly concerned about my problem.	.756	
The employees did not make the right effort to solve my problem.	.749	
The employees have proven competent and have ample authority to solve the problem.	.773	
The employees showed an interest in being equitable in solving the problem.	.829	
The employee has apologized for the problem or mistake in the service provided.	.752	
The Treatment and contact with staff to solve the problem were reasonable.	.782	
CUSTOMER SATISFACTION AFTER SERVICE RECOVERY		.931
I am pleased with the way this company has dealt with and responded to the problem.	.871	
I am satisfied with the process (the way of working) and the tools used to solve the problem.	.865	
In my opinion. The company provided a satisfactory solution to this particular problem.	.861	
I am satisfied with the compensation offered by the company (restore service. refund money and similar).	.795	

As we can see in the previous table (1) that is the values of the reliability coefficients (Cronbach's Alpha) are acceptable for all elements, as the value of the reliability coefficient ranges between (0.749 - 0.931). And also show a high correlation between each item to total item correlation, because the correlation between (0.681-0.871), these are good correlation coefficients, and item (3) the highest correlation. These results indicate the reliability and validity of the measuring instrument used and its statistical and logical validity to collect the data of the current study.

4. RESULTS:

4.1 SAMPLE PROFILE:
According to the sample data, the majority of the 400 respondents who answered the questionnaire were female (53.5 %) and male (46.5%) aged 21–30 years (73.25 %). Besides, the majority of the study respondents were college (85.25 %) and post graduate (13 %).A description of the respondent's profile is given in Table (2)

Table (2) Demography statistics

Gender	frequency	percentage
male	186	46.5
female	214	53.5
Age		
15-20	82	20.5
21-30	293	73.25
31-40	20	5.0
more than 40	5	1.25
Education		
Secondary school	6	1.5
college	341	85.25
Post graduate	52	13.0
others	1	.25

4.2 HYPOTHESIS TESTING:

This section describes the study's findings of the checking of the validity of the main hypothesis, the sub-hypothesis, and the results of the statistical methods. Regression analysis is applied to investigate in hypothesis H1 to test the effects of independent variables of empowerment of front line employee on the dependent variable of customer satisfaction after service recovery, the hypothesis states that 'there is a statistically positive correlation between empowerment of front line employee as an independent variable and customer satisfaction after service recovery as a dependent variable'. To test the hypothesis, a simple regression analysis was used. The results for this hypothesis from a simple regression analysis are shown in table (3):

Table (3) Regression Analysis of empowerment of Frontline Employee and customer satisfaction after service recovery

Hypothesis 1 Simple regression	R	R^2	$P-value$	β_0	β_1	$p-value$ (β_0)	$p-value$ (β_1)
*Empowerment of front line employees **Customer satisfaction after service recovery	.769	.591	.000 ****	3.219	.701	.000 ****	.000 ****

Note: * independent variable, ** dependent variable, **** sig level .01

From previous table show by confidence level 99% that there is effective a statistically positive correlation between empowerment of front line employees and customer satisfaction after service recovery because sig < 0.01, and R^2= 0.591 this means that empowerment of front line employees explains 59.1% from the variation in customer satisfaction after service recovery, and R= 0.769 this mean that the correlation between empowerment of front line employees and customer satisfaction after service recovery is positive correlation = 76.9%, So hypothesis H1 therefore are supported. The second hypothesis H2 focused on investigate the impact of empowerment of frontline employees on perceived justice with service recovery. To test the hypothesis, a simple regression analysis was used. The results for this hypothesis from a simple regression analysis are shown in table (4):

Table (4) Regression analysis empowerment of frontline employee and perceived justice

Hypothesis H2,H2.1, H2.2, H2.3 Simple regression	R	R^2	$P-value$	β_0	β_1	$p-value$ (β_0)	$p-value$ (β_1)
*Empowerment of front-line employees **Perceived justice service recovery	.801	.642	.001 ****	3.577	.294	.000 ****	.001 ****
*Empowerment of front-line employees **Distributive justice	.726	.527	.004 ****	3.891	.256	.000 ****	.004 ****
*Empowerment of front-line employees **Procedural justice	.691	.477	.03 ***	4.568	.361	.000 ****	.03 ***

| *Empowerment of front-line employees **Interactional justice | .776 | .602 | .000 **** | 4.286 | .381 | .000 **** | .000 **** |

Note: * independent variable, ** dependent variable, *** sig level .05, **** sig level .01

From pervious table show that: by confidence level 99% There is effective a statistically positive correlation between empowerment of front line employees and perceived justice with service recovery, because sig < 0.01 and $R^2= 0.642$ this means that empowerment of front line employees explains 64.2% from the variation in perceived justice, and R= 0.801 this mean that the correlation between empowerment of front line employees and perceived justice is positive = 80.1%, So hypothesis H2 therefore are supported. Also we can see by confidence level 99 % that is there is effective a statistically positive correlation between empowerment of front line employees and distributive justice because sig < 0.01, and $R^2= 0.527$ this means that empowerment of front line employees explains 52.7% from the variation in distributive justice, and R= 0.726 this mean that the correlation between empowerment of front line employees and distributive justice is positive = 72.6%, So hypothesis H2.1 therefore are supported. By confidence level 95% that is there is effective a statistically positive correlation between empowerment of front line employees and procedural justice because sig < 0.05, and $R^2 = 0.477$ this means that empowerment of front line employees explains 47.7% from the variation in procedural justice, and R= 0.691 this mean that the correlation between empowerment of front line employees and procedural justice is positive = 69.1%, So hypothesis H2.2 therefore are supported. By confidence level 99% that there is effective a statistically positive correlation between empowerment of front line employees and interactional justice because sig < 0.01, and $R^2 = 0.602$ this means that empowerment of front line employees explains 60.2% from the variation in interactional justice, and R= 0.776 this mean that the correlation between empowerment of front line employees and interactional justice is positive = 77.6%, So hypothesis H2.3, therefore are supported.

Hypothesis H3 is focusing to investigate the impact of the perceived justice (distributive, procedural and interactional) on customer satisfaction after service recovery. To test this hypothesis, stepwise regression analysis was used to compare the relative importance of the dimensions of perceived justice in determining the values of the dependent variable in order to determine the best explained variables. The table (5) shows the results of test this hypothesis:

Table (5) multiple regression analysis perceived justice and customer satisfaction after service recovery

Hypothesis 3 Multiple regression (stepwise)	Independent variable	R	R^2	$P-value$	β_0	β_1	β_2	$p-value$ (β_0)	$p-value$ (β_1)	$p-value$ (β_2)
perceived justice with service recovery *(distributive justice - procedural justice - interactional justice) **Customer satisfaction after service recovery	**Model 1**									
	*distributive justice	.826	.682	.000 ****	.642	.902		.000 ****	.000 ****	
	Model 2									
	*distributive justice - *interactional justice	.844	.712	.000* ***	.158	.732	.303	.456	.000 ****	.000 ****

Note: * independent variable, ** dependent variable, **** sig level .01

From pervious table show that: by confidence level 99% indicate that there is a significant correlation between only two dimensions of perceived justice, namely: interactional justice and distributive justice with the dependent variable, customer satisfaction after recovery, its value (0.844), while the third dimension represented by procedural justice was excluded from the regression equation. And $R^2 = .712$ that's means that both distributive and interactional justice together explains 71.2% of the variance in customer satisfaction after service recovery. The (R^2) values indicate that distributive justice is the most explanation important dimension of the variance in customer satisfaction after recovery (68.2%), followed by interactional justice, while there was no role for procedural justice in explaining the variance and change in customer satisfaction after recovery, so we can support hypothesis H3 but Partially because removed procedural justice from the equation of regression. H4 is focusing to investigate the role of perceived justice with service recovery as a mediator variable in the relationship between empowerment of front-line employees and customer satisfaction. Stepwise regression analysis was used to test this hypothesis. The table (6) shows the results of test this hypothesis:

Table (6) Test of mediation of perceived justice with service recovery

Hypothesis 4 Multiple regression (stepwise)	Independent variable	R	R^2	$P-value$	β_0	β_1	β_2	$p-value$ (β_0)	$p-value$ (β_1)	$p-value$ (β_2)
*Empowerment of front line employees *Perceived justice with service recovery	**Model 1**									
	*interactional justice	.721	.520	.000 ****	.385	.983		.198	.000 ****	

(distributive justice - interactional justice) **Customer satisfaction after service recovery	**Model 2**								
	*interactional justice - *distributive justice	.762	.581	.000*****	1.217	.913	.863	.480	.000 ****	.000 ****

Note: * independent variable, ** dependent variable, **** sig level .01

As we can see from previous table that the results showed that the mediator variable (perceived justice) represented in only two dimensions (distributive justice, interactional) are the owners of the direct impact on customer satisfaction after service recovery, and the independent variable has removed the empowerment of front-line employees from the regression equation, as both distributive and interactional justice combined explains 58.1% of variation in customer satisfaction after service recovery.

5. DISCUSSING AND ANALYSING OF THE STUDY HYPOTHESES TEST:

The study hypotheses are based on the results of some previous studies, where H1 hypothesis examines the effects of independent variables of empowerment of front line employee on the dependent variable of customer satisfaction after service recovery. the results of this test appeared that there is effective a statistically positive correlation between empowerment of front line employees and customer satisfaction after service recovery because sig < 0.01, and $R^2=0.591$ this means that empowerment of front line employees explains 59.1% from the variation in customer satisfaction after service recovery, and R= 0.769 this mean that the correlation between empowerment of front line employees and customer satisfaction after service recovery is positive correlation = 76.9%. This result indicates that the customer's awareness that of front-line employees interacting with customers, have all the powers and authority that enable them to respond quickly to the handling of the failure of the service on time plays an important role in raising customer satisfaction levels after service recovery, and it has been shown through customer responses that the customer service employees process complaints made by customers immediately without transferring the customer to another employee, and without the approval of the administration increases the efficiency of the process of service recovery and positively reflects on customer satisfaction.

This result was consistent with the studies (e.g. Liao, 2007;McQuilken, 2010;McQuilken, 2010;Villi and Koc, 2018). It concluded that there is a positive relationship between the two variables. On the other hand, the result of the current study differed with the findings of the study Ashill et al, (2004), where it did not find a strong effect of empowering employees on customer satisfaction, and indicated that success in gaining customer satisfaction after service recovery depends on the financial and tangible compensation that the company provides the customer as compensation for the loss sustained due to the service failure, and the reason for this difference may be due to the difference in the environment and the application sector, as it may be that the awareness of the sample vocabulary in the current study to enable front-line employees is greater than the previous study. This finding is logical because it is normal for the customer service employee to have the authority and independence to take decisions to respond quickly to service failures and to fix them in a manner consistent with the customer's wishes and requirements, which is a positive reflection of customer satisfaction after service recovery.

The second hypothesis H2 focused on investigate the effects of empowerment of frontline employees as independent variable on perceived justice with service recovery as a dependent variable. The results of this hypothesis showing that there is effective a statistically positive correlation between empowerment of front line employees and perceived justice with service recovery, because sig < 0.01, and $R^2=0.642$ this means that empowerment of front line employees explains 64.2% from the variation in perceived justice, and R= 0.801 this mean that the correlation between empowerment of front line employees and perceived justice is positive = 80.1%, while explains (0.527 - 0.477 - 0.602) from the variation in distributive justice, procedural justice , interactional justice respectively. This result indicates that the perception of the customer that the company enables front-line employees to take the initiative in seeking solutions commensurate with each customer's requirements and desires during the service recovery thus giving them all the powers and abilities that allow them to handle service failure on time increases the sense of fairness in the trading process between the Consumer and The Company. It has been found through customer responses that interactional justice is most affected by the empowerment of front-line employees and is followed by both distributive and procedural justice, that is, delegating authority to the employee to take the necessary solutions in a manner commensurate with the situational conditions increases the employee's confidence in his capabilities and reflects positively on the ease of service recovery procedures. This result was in line with both studies (Fisk *et al.*, 2011; Nadiri & Tanova,2016;Hoffman &Rotalsky, 2016), Which found a positive relationship between the two variables. From the above, the result of the second hypothesis test revealed the presence of a positive significant effect on the empowerment of front-line employees as an independent variable on perceived justice with service recovery as a dependent variable. This finding is logical because it is normal that the ownership of the customer service employees to the authority, which enables them to respond quickly to the recovery of the service and repair it according to the customer's wishes and requirements, contributes to the customer's sense of the fairness of the recovery process and the fairness of the whole exchange process.

The third hypothesis H3 investigate the effect of perceived justice (distributive justice, procedural justice, and interactional justice) as an independent variable on customer satisfaction after service recovery as a dependent variable, the results of the hypothesis test showed that there is a significant correlation between only two dimensions of perceived justice, namely: interactional justice and distributive justice with the dependent variable, customer satisfaction after recovery, its value (0.844), while the third dimension represented by procedural justice was excluded from the regression equation. And $R^2 = (.712)$ This means that both distributive and interactional justice together explains 71.2% of the variance in customer satisfaction after

service recovery, The (R^2) values indicate that distributive justice is the most explanation important dimension of the variance in customer satisfaction after recovery (68.2%), followed by interactional justice. While there was no role for procedural justice in explaining the variance and change in customer satisfaction after recovery, this result indicates that the customer's awareness of the fairness of the service recovery process contributes to raising the levels of customers satisfaction, and that customer satisfaction has been affected more by distributive justice, as the customer's feeling that the company provides appropriate and fair compensation for failure in the service contributes significantly to increasing his satisfaction. And customer satisfaction affected by interactional justice to a lesser degree. In other words, the customer's sense of the fairness of the tangible financial compensation that he received as part of the service recovery raised his levels of satisfaction with a greater percentage of interactive justice (apology, an explanation for the cause of failure), while customer satisfaction was not affected by procedural justice. This finding was partly agreed with both studies (Ellyawati et al,2012; Nefat et al, 2012; Migacz et al, 2018) With regard to the decreased effect of procedural justice on consumer satisfaction after recovery of service, while the current study differed with the previous studies about interactional justice, as previous studies concluded that interactional justice is the most impact on customer satisfaction, and the reason for this may be that the size of the failure in the service was not large, and therefore the moral compensation was sufficient to improve customer satisfaction after failure.

Hypothesis H4 examines the role of perceived justice (distributive, procedural, and interactional justice) as a mediator variable in the relationship between empowerment of frontline employees and customer satisfaction after service recovery. The results showed that the mediator variable (perceived justice) represented in only two dimensions (distributive justice, interactional) are the owners of the direct impact on customer satisfaction after service recovery, and the independent variable has removed the empowerment of front-line employees from the regression equation, as both distributive and interactional justice combined explains 58.1% of variation in customer satisfaction after service recovery. This result indicates that despite the importance of empowerment of frontline employees in gaining customer satisfaction, the role that perceived justice plays in the process of handling service failure in affecting customer satisfaction is more important than the role of empowerment of frontline employees, and it can be explained that the effect of empowering employees during the customer complaints process of customer satisfaction after service recovery, it depends on the customer's awareness of the fairness of the recovery process. From the above, it is clear that mediation exists for the perceived justice with service recovery variable in the relationship between the empowerment of frontline employees and customer satisfaction after service recovery.

6. IMPLICATIONS AND CONTRIBUTIONS:

The current study provided scientific evidence for a significant positive impact relationship between both the empowerment of frontline employees and perceived justice with service recovery on one side, and customer satisfaction after service recovery on the other side. This result came in support the results of previous studies that tested that relationship in many areas of application, and this indicates that the field of application may not have an important impact on this relationship, and thus this current study has contributed from a scientific knowledge to support the literature Previous that dealt with these relationships. Hence, the current study recommends the need for administrative leaders in Internet companies to create an appropriate and encouraging cultural environment to adopt the concept of empowering frontline employees on a large scale.

Also the results of the current study indicated that there is a significant positive impact to the empowerment of front-line employees on perceived justice with service recovery, which confirms the importance of empowering employees to create awareness among customers of the fairness of the service recovery process, and this result is considered an addition to the few kinds of literature available in this regard, where it has not been studied this relationship is sufficient in the foreign environment, as it has not been discussed in Arab literature. The current study recommends the need to enhance and create awareness among customers of the fairness of the service recovery process by designing strategies and procedures related to service recovery so that they are clear, and these procedures should be characterized by speed and flexibility sufficient to create awareness among clients of the fairness of the service recovery process, in the context of studying the mediating role of the perceived justice with service recovery in the relationship between the empowerment of frontline employees and customer satisfaction after service recovery. The current study emphasized the role of perceived justice as a mediator variable in the relationship between the independent and dependent variable. This result is in addition to the previous and available literature in this field, as the researcher did not obtain a study that dealt with the mediation role to the empowerment of front-line employees in the relationship between the independent and dependent variables, whether in the Arab or foreign environment.

7. LIMITATIONS AND FUTURE RESEARCH:

The current study was limited to the four main companies that provide internet service in Egypt, namely (we company -Orange - Vodafone Data - Etisalat Egypt) because these companies acquire more than 90% of the market share in Egypt. And also the study relied on the questionnaire as a single tool to collect data for the current study because the questionnaire is appropriate for the scientific measurement of perceived justice with service recovery variables, customer satisfaction after service recovery, and empowerment of frontline employees. This research, like all other research, suffers from numerous limitations, which limit the generalization of findings and open up avenues for future research. First, as this study focuses only on one service sector (internet service) and in a specific country, the results will not be applied to other service sectors and geographical areas. Future research can, therefore, replicate this study in other service sectors and cultures. The second constraint applies to the sample of this study the study used a convenience sampling method consisting of 400 responses. Future research can address this constraint by taking a bigger, randomly selected sample that may provide a more detailed outcome. The findings of the current study and its implications have posed a number of points that could be a fertile field for future studies such as: study of some other variables not discussed in the current study that may have an effect on customer satisfaction after service recovery and perceived justice with service recovery, such as the severity of service failures, customer engagement in handling failures, and customer

expectations for service failures, Future research may find some other moderating variables in the relationship between empowerment of frontline employees and customer satisfaction after service recovery among these factors, the writers suggest the personality of the customer, a study of the effect of perceived justice on some behavioral responses of customers such as: intention to repeat purchase, spoken word (WOM) and price sensitivity, and the intention of the customer to file a future complaint, study the effects of perceived justice and pricing policies on consumer response.

REFERENCES:

Al-Alak, B. A. (2009). Measuring and evaluating business students satisfaction perceptions at public and private universities in Jordan. *Asian Journal of Marketing*, *3*(2), 33–51.

Andreassen, T. W. (2000). Antecedents to satisfaction with service recovery. *European Journal of Marketing*.

Ashill, N. J., Krisjanous, J., & Carruthers, J. (2004). Antecedents and outcomes of service recovery perfomance in private healthcare: An empirical investigation. *International Review on Public and Nonprofit Marketing*, *1*(2), 57.

Bakar, S. Z. A. (2017). *Service Recovery in E-Services: Service Recovery Process, Perceived Justice and Satisfaction*. Southern Illinois University at Carbondale.

Balaji, M. S., Roy, S. K., & Quazi, A. (2017). Customers' emotion regulation strategies in service failure encounters. *European Journal of Marketing*, *51*(5/6), 960–982.

Boshoff, C. (1999). RECOVSAT: An instrument to measure satisfaction with transaction-specific service recovery. *Journal of Service Research*, *1*(3), 236–249.

Bugg Holloway, B., Wang, S., & Beatty, S. E. (2009). Betrayal? Relationship quality implications in service recovery. *Journal of Services Marketing*, *23*(6), 385–396.

Cahill, D. L. (2006). *Customer loyalty in third party logistics relationships: findings from studies in Germany and the USA*. Springer Science & Business Media.

Dasu, S., & Rao, J. (1999). Nature and determinants of customer expectations of service recovery in health care. *Quality Management in Health Care*, *7*(4), 32–50.

De Matos, C. A., Henrique, J. L., & Alberto Vargas Rossi, C. (2007). Service recovery paradox: a meta-analysis. *Journal of Service Research*, *10*(1), 60–77.

De Matos, C. A., Vieira, V. A., & Veiga, R. T. (2012). Behavioural responses to service encounter involving failure and recovery: the influence of contextual factors. *The Service Industries Journal*, *32*(14), 2203–2217.

del Río-Lanza, A. B., Vázquez-Casielles, R., & Díaz-Martín, A. M. (2009). Satisfaction with service recovery: Perceived justice and emotional responses. *Journal of Business Research*, *62*(8), 775–781.

Ellyawati, J., Purwanto, B. M., & Dharmmesta, B. S. (2012). The effect of perceived justice on customer satisfaction in the service recovery context: testing mediating variables. *Journal of Service Science (JSS)*, *5*(2), 87–100.

Fisk, R. P., Patricio, L., Edvardsson, B., Tronvoll, B., & Höykinpuro, R. (2011). Complex service recovery processes: how to avoid triple deviation. *Managing Service Quality: An International Journal*.

Ghalandari, K. (2013). Perceived Justice's Influence on Post-Purchase Intention s and Post-Recovery Satisfaction in Online Purchasing: the Moderating Role o f Firm Reputation in Iran. *Research Journal of Applied Sciences, Engineering and Technology*, *5*(3), 1022–1031.

Gohary, A., Hamzelu, B., & Alizadeh, H. (2016). Please explain why it happened! How perceived justice and customer involvement affect post co-recovery evaluations: A study of Iranian online shoppers. *Journal of Retailing and Consumer Services*, *31*, 127–142.

Gupta, S., Lehmann, D. R., & Stuart, J. A. (2004). Valuing customers. *Journal of Marketing Research*, *41*(1), 7–18.

Harun, A., Rokonuzzaman, M., Prybutok, G., & Prybutok, V. R. (2018). How to influence consumer mindset: A perspective from service recovery. *Journal of Retailing and Consumer Services*, *42*, 65–77.

Hess Jr, R. L., Ganesan, S., & Klein, N. M. (2003). Service failure and recovery: the impact of relationship factors on customer

satisfaction. *Journal of the Academy of Marketing Science*, *31*(2), 127–145.

Hoffman, K. D., & Bateson, J. E. G. (2010). *Services marketing: concepts, strategies, & cases*. Cengage learning.

Hoffman, K. D., Kelley, S. W., & Rotalsky, H. M. (2016). Retrospective: Tracking service failures and employee recovery efforts. *Journal of Services Marketing*.

Homburg, C., & Fürst, A. (2005). How organizational complaint handling drives customer loyalty: an analysis of the mechanistic and the organic approach. *Journal of Marketing*, *69*(3), 95–114.

Huang, M.-H. (2011). Re-examining the effect of service recovery: the moderating role of brand equity. *Journal of Services Marketing*, *25*(7), 509–516.

Kanousi, A. (2005). An empirical investigation of the role of culture on service recovery expectations. *Managing Service Quality: An International Journal*.

Kau, A., & Loh, E. W. (2006). The effects of service recovery on consumer satisfaction: a comparison between complainants and non-complainants. *Journal of Services Marketing*.

Kerr, A. H. (2004). *Service recovery and the elusive paradox: an examination of the effects of magnitude of service failure, service failure responsiveness, service guarantee and additional recovery effort on service recovery comes*.

Kotler, P., & Armstrong, G. (2006). *Principles of marketing 11th ed*. New Jersey: Pearson/Prentice Hall.

Kotler, P., Keller, K. L., Brady, M., Goodman, M., & Hansen, T. (2012). *Marketing Management. England*.

Kunz, W. H., & Hogreve, J. (2011). Toward a deeper understanding of service marketing: The past, the present, and the future. *International Journal of Research in Marketing*, *28*(3), 231–247.

Kuo, Y.-F., & Wu, C.-M. (2012). Satisfaction and post-purchase intentions with service recovery of online shopping websites: Perspectives on perceived justice and emotions. *International Journal of Information Management*, *32*(2), 127–138.

Kwon, S., & Jang, S. S. (2012). Effects of compensation for service recovery: From the equity theory perspective. *International Journal of Hospitality Management*, *31*(4), 1235–1243.

Liao, H. (2007). Do it right this time: The role of employee service recovery performance in customer-perceived justice and customer loyalty after service failures. *Journal of Applied Psychology*, *92*(2), 475.

Lin, H., Wang, Y., & Chang, L. (2011). Consumer responses to online retailer's service recovery after a service failure. *Managing Service Quality: An International Journal*.

Lin, W.-B. (2009). Service recovery model: the integrated view. *The Service Industries Journal*, *29*(5), 669–691.

Maxham III, J. G., & Netemeyer, R. G. (2002). Modeling customer perceptions of complaint handling over time: the effects of perceived justice on satisfaction and intent. *Journal of Retailing*, *78*(4), 239–252.

McCollough, M. A., & Bharadwaj, S. G. (1992). The recovery paradox: an examination of consumer satisfaction in relation to disconfirmation, service quality, and attribution based theories. *Marketing Theory and Applications*, *119*.

McQuilken, L. (2010). The influence of failure severity and employee effort on service recovery in a service guarantee context. *Australasian Marketing Journal (AMJ)*, *18*(4), 214–221.

Michel, S., Bowen, D., & Johnston, R. (2009). Why service recovery fails: Tensions among customer, employee, and process perspectives. *Journal of Service Management*, *20*(3), 253–273.

Migacz, S. J., Zou, S., & Petrick, J. F. (2018). The "terminal" effects of service failure on airlines: Examining service recovery with justice theory. *Journal of Travel Research*, *57*(1), 83–98.

Morrisson, O., & Huppertz, J. W. (2010). External equity, loyalty program membership, and service recovery. *Journal of Services Marketing*, *24*(3), 244–254.

Nadiri, H., & Tanova, C. (2016). What factors influence employee service recovery performance and what are the consequences in health care? *Quality Management in Health Care*, *25*(3), 162–175.

Nefat, A., Belazić, D., & Alerić, D. (2012). Antecedents and outcomes of service recovery satisfaction in telecommunications in Croatia along with the role of image and perceived switching costs. *Economic Research-Ekonomska Istraživanja*, *25*(4), 1051–1066.

Nguyen, D. T., McColl-Kennedy, J. R., & Dagger, T. S. (2012). Matching service recovery solutions to customer recovery preferences. *European Journal of Marketing*, *46*(9), 1171–1194.

Nikbin, D., Marimuthu, M., Hyun, S. S., & Ismail, I. (2015). Relationships of perceived justice to service recovery, service failure attributions, recovery satisfaction, and loyalty in the context of airline travelers. *Asia Pacific Journal of Tourism Research*, *20*(3), 239–262.

Oliver, R. L., Rust, R. T., & Varki, S. (1997). Customer delight: foundations, findings, and managerial insight. *Journal of Retailing*, *73*(3), 311.

Prasongsukarn, K., & Patterson, P. G. (2012). An extended service recovery model: the moderating impact of temporal sequence of events. *Journal of Services Marketing*, *26*(7), 510–520.

Proenca, T., Torres, A., & Sampaio, A. S. (2017). Frontline employee empowerment and perceived customer satisfaction. *Management Research: Journal of the Iberoamerican Academy of Management*, *15*(2), 187–206.

Rawls, J. (2009). *A theory of justice*. Harvard university press.

Reichheld, F. F., & Sasser, W. E. (1990). Zero defeofions: Quoliiy comes to services. *Harvard Business Review*, *68*(5), 105–111.

Rungting, T. U., & Ke, C. (2009). The dynamic role of "should expectation" in service recovery paradox. *Frontiers of Business Research in China*, *3*(4), 583–598.

Sabharwal, N., & Soch, H. (2011). Confirmatory factor analysis of determinants of service recovery. *Global Business Review*, *12*(2), 297–318.

Siagian, Y. M., & Triyowati, H. (2015). Service Recovery Based on Perceived Justice: A Study on Locus Attribution. *International Journal of Business and Management*, *10*(7), 99.

Singh, J., & Crisafulli, B. (2016). Managing online service recovery: procedures, justice and customer satisfaction. *Journal of Service Theory and Practice*, *26*(6), 764–787.

Siu, N. Y.-M., Zhang, T. J.-F., & Yau, C.-Y. J. (2013). The roles of justice and customer satisfaction in customer retention: A lesson from service recovery. *Journal of Business Ethics*, *114*(4), 675–686.

Smith, A. K., Bolton, R. N., & Wagner, J. (1999). A model of customer satisfaction with service encounters involving failure and recovery. *Journal of Marketing Research*, *36*(3), 356–372.

Tsai, K.-H. (2004). An Examination of the Effect of Brand Image, Perceived Risk and Customer Satisfaction on Brand Loyalty-An Empirical Study of Laptop Computer in Taiwan. *Unpublished Master's Thesis, National Cheng Kung University*.

Tsao, W.-C. (2018). Star power: the effect of star rating on service recovery in the hotel industry. *International Journal of Contemporary Hospitality Management*, *30*(2), 1092–1111.

Varela-Neira, C., Vázquez-Casielles, R., & Iglesias, V. (2010). The effects of customer age and recovery strategies in a service failure setting. *Journal of Financial Services Marketing*, *15*(1), 32–48.

Villi, B., & Koc, E. (2018). Employee attractiveness and customers' service failure perceptions. *Journal of Hospitality Marketing & Management*, *27*(1), 41–60.

Wang, Y.-S., Wu, S.-C., Lin, H.-H., & Wang, Y.-Y. (2011). The relationship of service failure severity, service recovery justice and perceived switching costs with customer loyalty in the context of e-tailing. *International Journal of Information Management*, *31*(4), 350–359.

Weng, H. (2009). *Service Recovery: Trend, Path Model, and Cultural Comparison*.

Weun, S., Beatty, S. E., & Jones, M. A. (2004). The impact of service failure severity on service recovery evaluations andpost-recovery relationships. *Journal of Services Marketing*, *18*(2), 133–146.

Wirtz, J., & Mattila, A. S. (2004). Consumer responses to compensation, speed of recovery and apology after a service failure.

International Journal of Service Industry Management, *15*(2), 150–166.

Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2003). *Services marketing: integrating customer focus across the firm*. McGraw-Hill New York.

Zhu, Z., Sivakumar, K., & Parasuraman, A. (2004). A mathematical model of service failure and recovery strategies. *Decision Sciences*, *35*(3), 493–525.

Attia Abd Elkader Attia Ali
School of Business, Sichuan University, Chengdu, China
Email: Attiaali012@gmail.com

Ahmed Abd El-Reheem Ahmed Mohamed
School of Mathematics and Statistics, Central South University, Hunan, China
Email: Ahmedrohim91@yahoo.com