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A PLEASANT SURPRISE OR INJURY PLUS INSULT?
CONSUMERS' (DIS) SATISFACTION WITH RECOVERY STRATEGIES FOR
SERVICE FAILURE

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MPHIL

LINGNAN UNIVERSITY

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CONSUMERS' (DIS) SATISFACTION WITH RECOVERY STRATEGIES
FOR SERVICE FAILURE

by

WEI Muyu

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ABSTRACT

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Master of Philosophy

Dealing with service failure, one question is constantly asked: why certain consumers are still dissatisfied even though compensations are made? The effectiveness of recovery strategy has been discussed in the context of service failure paradox and second deviation in the past literature. In this thesis, these two issues were brought together under the same framework – from the perspective of expectation. We propose that expectation mediates consumers' evaluation of recovery strategies, and leads to different levels of satisfaction and re-patronage intention. The expectation is further influenced by the type of resource spending consumers are reminded of and the failure type.

Two studies were carried out to verify hypotheses. In study one, we used a 2 (resource spending: time vs. money) by 2 (high vs. low discount rate) by 2 (strong vs. weak apology) between subject factorial design to confirm the main effect and mediation effect of expectation on compensation strategies and overall satisfaction as well as re-patronage intention. Moreover, the framing effect of resource spending on time/money on expectation was also tested. In study two, we used a 2 (resource spending: time vs. money) by 2 (outcome vs. process failure) between subjects factorial design to validate the influence of resource spending type and failure types on expectation and satisfaction.

DECLARATION

I declare that this is an original work based primarily on my own research, and I warrant that all citations of previous research, published or unpublished, have been duly acknowledged.

WEI Muyu

CERTIFICATE OF APPROVAL OF THESIS

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CHAPTER 1 INTRODUCTION

1.1 Problem Definition

A real story happens in my life, like two sides of a coin -- the very same situation has two different endings:

A friend of mine, Juliet, who purchased a kitchen set on Amazon.com, was dissatisfied with the content delivered. She called the customer service and explained the situation. Amazon.com responded with following solution: she can keep the kitchen set and get full refund. Being so excited and over-satisfied with the compensation result, Juliet even praised the company on Facebook and shared it with all her friends.

However, things turned differently when it happened to one professor, who purchased a set of books on Amazon. The books turned out to be the wrong edition. After a few angry complaint calls, the Amazon.com provided the same solution: keep the books and get full refund. However, it evoked even more fierce anger. The money returned means nothing to the professor;; however, the time lost during the whole purchase failure was somehow more heart-aching. Not to mention that he still ended up with books of the wrong edition.

Why does the same compensation procedure cause two kinds of totally different reactions? It has been noted that recovery satisfaction may not be restored despite effective recovery (Bolton & Drew, 1991; McCollough, Berry, & Yadav, 2000). Sometimes service-providers have compensated with plenty efforts and shown their sincerity with full refund. Why are some consumers over-satisfied but some are even more angry? What do consumers expect when a service failure

occurs? And why consumers are still angry when a valid compensation has been made?

In this thesis, we try to answer the question why certain compensation strategies would make some consumers over-satisfied while others even angrier. Focusing on the expectations that consumers have on compensation efforts, we attempt to examine the phenomena of service failure paradox and second deviation within the same framework.

1.2 Rationale for the Study

How firms deal with customers after service failures are one of the most important issues facing service providers, especially when such failures have been inevitable. With both monetary and emotional resources invested, consumers showed anger and anxiety, which drive them to expect more than monetary compensation (Folkes, 1984a; Folkes, Koletsky, & Graham, 1987). Therefore, when facing a service failure, the salvage of monetary loss as well as the corresponding compensatory efforts are often discussed by researchers. However, rather than the monetary loss, sometimes it is the waste of other resources that hurt consumers more, for example, the time invested when consuming the service. How to interpret consumers' complaint and conduct corresponding compensatory efforts are important for service-providers. It was derived that 43% of dissatisfaction was caused by service-providers' inability or unwillingness to respond (Smith & Bolton, 1998). Based on past literature, recovery and compensation efforts cast significant influence on consumers' word-of-mouth, repurchase intention, as well as the general consumer satisfaction. Consumers shift their evaluation of these variables according to their satisfaction with service recovery (Maxham III & Netemeyer, 2002; Smith, Bolton, & Wagner, 1999; Tax, Brown, & Chandrashekar, 1998).

Facing service failures, aside from exhibiting worries and anger (Folkes, 1984a), consumers also generate expectations over service-providers' recovery

efforts. Defined as “service recovery expectation”, consumers have predictions over the extent to which service-providers should handle their complaints (Maxham III & Netemeyer, 2002; Oliver, 1996). In the past, two issues were brought out based on whether the compensatory efforts could meet consumers’ expectations: the service recovery paradox and the second deviation. The service recovery paradox indicates the situation where the recovery efforts exceed consumers’ expectations, and such over-satisfaction would transfer into greater consumers’ loyalty and positive word-of-mouth (Hart, Heskett, & Sasser, 1990; McCollough, Micheal A. & Bharadwaj, Sundar G., 1992). On the other hand, the second deviation deals with the situation where the recovery efforts fail to meet consumers’ expectations, leading to worsening repurchase intention as well as attribution intention of consumers (Maxham III & Netemeyer, 2002).

Either exceeding or failing to meet the expectation, the focus of past literature tends to focus on how to meet the customers’ expectations, since the service failure is an accident that has occurred. However, seldom has the literature considered the fluctuating and shifting nature of consumers’ expectations on service-failure recovery. In other words, consumers’ expectations would fluctuate when facing failure accident of the same severity, due to the resource they valued, or the type of failure. Therefore, how they evaluate the compensatory efforts will be adjusted according to their changes of their expectations and more importantly whether the compensations meet their expectations.

Other issues, the issue that the past literature has barely touched on, is are the time and emotional resources that consumers have invested when consuming the service. Consumers have invested both money and time when consuming any services. As the most commonly used resource, the monetary resource is usually considered as the cause of consumers’ anger as well as the evaluation of the sincerity of compensation. Whereas the time resource, which is more elastic and can be easily adjusted (Hsee, 1995, 1996), is not fully developed in the literature, especially in the context of service failure. In principle, time resource elicit more emotional responses (Lee, Amir, & Ariely, 2009; Lee, Lee, & Zauberaman, 2011; Mogilner & Aaker, 2009), especially when it concerns experiential consumptions. Therefore, time

resource can be another cause of consumers' anger, and adjust consumers' expectation accordingly.

In the past literature regarding time vs. money, the perception differences were the main focus. Focusing on the perceptual differences of time vs. money, important issues in classic economics were discussed, such as the sunk cost (Soman, 2001), opportunity cost (Lee et al., 2011; Okada & Hoch, 2004), mental account (Leclerc, Schmitt, & Dubé, 1995; Soster, Monga, & Bearden, 2010), and the resource slack (Zauberman & Lynch, 2005). Consumers' construal of choices and preferences is the main implication in response to time vs. money perceptions. Although service failure was one of the scenarios in several studies(e.g., Okada & Hoch, 2004), it was still used in comparison with a satisfied service, rather than the direct research object. Therefore, it is necessary to explore how time and money would influence people's expectations after service failure, especially in recovery compensation.

Dealing with expectation, another important framework was the failure type. As one way to distinguish and categorize the service failure, the process and outcome failure (Smith et al., 1999) can be a useful construct. In addition to the explicit definition of the justice influences (Smith et al., 1999) as well as the attribution factors (Hart et al., 1990), this division further stresses the way in which failure has happened. More importantly, this construct provides a valid tool for managers to identify different situations and to choose the suitable compensation strategy.

1.3 Research Objectives

In this paper, we attempt to answer the question raised in the first section: why does one recovery strategy seem to be successful with certain consumers, but make things worse for other consumers?

First, in the context of service failure, we put forward two concepts that have barely been discussed together: service failure paradox and second deviation. We

accomplish this goal by integrating the role of consumer expectation. By definition, service failure paradox refers to the situation when recovery exceeds the expectation and leads to over-satisfaction among consumers (Matos, Henrique, & Alberto Vargas Rossi, 2007; Maxham III & Netemeyer, 2002; McCollough, Micheal A. & Bharadwaj, Sundar G., 1992; Smith & Bolton, 1998), while second deviation refers to the situation when recovery fails to meet the expectation and lead to another failure (Maxham III & Netemeyer, 2002). The key point, which has been missing in the existing literature, lies in the expectation of consumers regarding the recovery efforts after service failure. We discuss how the expectation can be associated with the post-recovery satisfaction, and how it can be influenced by other moderating factors: type of resource and failure types.

Second, in terms of the value of time vs. money, the cost that consumers have incurred during service consumption will be re-evaluated. In addition to the monetary resource that consumers have invested for service consumption, time is another kind of important resource that is cherished by consumers. However, it has received attention in the past literature . In the past discussion of time vs. money, time was usually associated with emotional resource (Lee et al., 2009, 2011; Mogilner & Aaker, 2009; Reed, Aquino, & Levy, 2007), and was more elastic when judging its value (Hsee, 1995, 1996; Tsai & Hsee, 2009). Through mental account theory (R. Thaler, 1980; R. H. Thaler, 1999), and the resource exchange theory (Foa, Tornblum, & Foa, 1992), we will discuss the value judgment of time vs. money in the context of service failure. We will focus on how the judgment of time vs. money will influence consumers' expectation on recovery strategy.

Finally, given the findings from the experiments, we explore the managerial implications that can help managers better solve the question: which strategy to use for recovery of service failure? Through understanding, adjusting and perhaps manipulating the expectation of consumers, we lay out several useful options for service-providers to consider. We will discuss two concepts that can adjust consumers' expectation on recovery strategy: resource spent and the failure type. Based on their understanding and certain evidence, service-providers can adopt a more effective recovery strategy to minimize consumer dissatisfaction while maximizing cost savings.

1.4 Organization of This Thesis

In this thesis, we explore the role of expectation of recovery strategy post to service failure, influenced by the resource spent in time/money and the failure type, as well as their effects on the overall satisfaction and re-patronage intentions of consumers. Through the discussion of the expectation of consumers, and the discrepancy between consumer expectation and the compensation strategy, we develop a framework that integrates service failure paradox and the second deviation, and provide meaningful implications for managers in their recovery efforts after service failures. The thesis is organized as follows.

Chapter one introduces the study, rationale and the research objectives. In chapter two, we review the literature related to service failure. The theoretical framework and the hypotheses are introduced in chapter three. In chapter four and chapter five, we present the research design and their results for the two experimental studies to test the hypotheses. In chapter 6, we discuss the findings and conclusions as well as the managerial implications. Finally, limitations of the study and directions for future research are included.

CHAPTER 2 LITERATURE REVIEW

2.1 Service failure

The content of service failure nowadays has been extended to both service and product providing behaviors. Early discussions, such as those by Garvin (1984), propose that to distinguish a product based on quality, one may have internal failures (where the failure was observed before leaving the factory) and the external failures (where the failure incurred after the product has been used or installed).

Being different from a physical good, service has its unique characteristics, including intangibility, heterogeneity as well as inseparability. The intangibility refers to the fact that it is difficult to set quality standards and unified specifications for services; therefore, the services are heterogeneous in that they differ in every detail, from producer to producer, from customer to customer. Meanwhile, the generation of service determines that it should be inseparable, indicating that the manufacturing process and the deliver process occur at the same time (Parasuraman, Zeithaml, & Berry, 1985).

However, the satisfaction levels of services provided are still hard to evaluate. Proposed by Lewis & Booms (1983), service quality can be further defined by comparing expectation with performance, and to distinguish it by checking whether it is consistent with the expectation of consumers. Therefore, the valence and the direction of the initial expectation affect how consumers judge the quality of services.

Other standards exist on how to evaluate the service quality, as Grönroos (1984) argues that it can be divided into the impersonal service outcome and interpersonal process of service delivery. The previous one refers to the “what”

concept in service provision, such as the content of services that consumers receive; whereas the later one refers to the manner of the service provision, such as the manners in which services are delivered to consumers.

One of the most commonly used ways to distinguish service failures is judged in terms of the consequences of the failure (Bitner, Booms, & Mohr, 1994; Bitner, Booms, & Tetreault, 1990; Smith et al., 1999). The outcome failure refers to the physical/instrumental outcome loss, where the service providers fail to fulfill the basic service needs or fail to perform the core service (e.g. a restaurant fails to serve the dish ordered); whereas the process failure refers to the invisible (i.e., social and psychological) losses, because the core service is flawed or deficient in some way (e.g. a restaurant waiter was rude when serving the dish). The influence of failure type and associated expectation will be discussed in the following section.

What do consumers fear in the context of service? Consumers usually fear that when returning the “failed products”, the sellers will not agree with their point of view about where the fault lies as well as the attribution responsibilities (Richins 1979). How service-providers respond shed a significant meaning in the eyes of consumers. More importantly, consumer dissatisfaction is not caused by failures singularly, a large proportion (43%) of dissatisfaction was caused by service-providers’ inability or unwillingness to respond (Smith & Bolton, 1998). The inappropriate response contributes significantly to consumer dissatisfaction as well as their unfavorable re-patronage decisions (Bitner et al., 1990; Smith & Bolton, 1998).

Service recovery refers to the actions that an organization takes in response to service failure (Grönroos, 1984). Aside from greater satisfaction, a successful recovery will enhance the company’s relationship with consumers and prevent customer defections (Fornell & Wernerfelt, 1987). However, recovery usually would cost more and bring less satisfaction. According to the prospect theory (Kahneman & Tversky, 1979), people usually are more sensitive to losses than to gains. In other words, recovery will bring less utility comparing to the utility loss that consumers perceived in the service failure (Berry, 1991).

Moreover, the evaluation of compensation is not fixed: people seek explanations that fit their expectations. According to the work of Snyder & Swann (1978), that people seek information that confirms their hypotheses about events, even if what they hold about the event is biased. They may even change their attitudes to stay consistent with their conjectures (Festinger, 1957). And if individuals reach their conclusions for the service failure, it is hard for them to give up what they believed. They tend to rely on biased information and ignore the rest (Anderson & Ross, 1980), and believe that companies should be responsible for the failure. As such, they will be more likely to expect redress (Folkes, 1984a). Furthermore, the follow-up recovery efforts would receive more attention than usual, as consumers tend to use such evidence to further conjecture service-providers' attitudes. Thus, the evaluation of service tend to be influenced by consumers affective responses (Folkes et al., 1987), which are further influenced by the judgment and perceptions that consumers have about the managers' attitudes (Folkes, 1988).

From the perspectives of consumers and service-providers, it is possible that they blame each other for the responsibility for the service failure (Weiner, 1980; Wortman, 1983). It is easy to understand that consumers may think that sellers did not inform them the situation completely, or the service providers should have the damages under control, regardless of the cause of such service failures are controllable or not. From the service-providers' perspective, consumers should be responsible for their choices. However, service providers barely blame consumers under such situation as it appears to be uncontrollable to consumers (Folkes & Kotsos, 1986; Weiner, 1985).

A number of factors may contribute to consumers' affective responses to service failure, e.g. controllability. When consumers perceive that the failure is controllable (such as the delay of flight is caused by the inappropriate operation of the airline company), they may choose retaliation as an expression of their anger (Folkes, 1984a; Folkes et al., 1987). Stability is another important factor discussed by many previous researchers, as predicted stable causes of product failures may cause consumers not to consider re-purchase. In other words, how the service failure is framed and perceived by consumers will influence their affective reaction directly.

If the failure is caused by service-providers, consumers will perceive the recovery compensations as naturally reasonable procedures. Another failure on the part of service providers will result in more anger and dissatisfaction.

Justice is another issue in service failure and recovery (Oliver & Swan, 1989; Tax et al., 1998). The perceived justice is regarded as an important factor that influences consumer satisfaction, especially in the recovery stage. In the discussion by Smith et al. (1999), perceived justice is categorized into three dimensions: distributive justice, procedural justice, and interactional justice. Distributive justice is built on the context of the resource allocation and the outcome of exchange (Adams 1965, Deutsch, 1975). Procedural justice is built on the context of how the resolutions were made (Leventhal, 1976; Lind & Tyler, 1988; Thibaut & Walker, 1976). Interactional justice is built on the manner in which information is exchanged and the outcome is communicated (Bies & Shapiro, 1987). In the context of service failure recovery, these three dimensions of perceived justice are considered to be positively associated with consumers' satisfaction (Smith et al., 1999).

In the following section, we adopt another perspective on service failure division. Moreover, in terms of the consequences of service failure recovery, two concepts are often brought out: service failure paradox and second deviation. In the next two sections, we discuss these two concepts and explore how they differentiate over the one the key concept --- consumer expectation.

2.1.1 Process vs. Outcome Failure

It is common to evaluate the failure from the perspective of the consequences of failure. Service failure is therefore divided into two categories: outcome failure and process failure (Adams, 1966; Deutsch, 1975). Outcome failure refers to the physical/instrumental outcome loss, where service providers fail to fulfill the basic service needs or fail to perform the core service (e.g. a restaurant fails to serve the dish ordered). Process failure refers to the invisible (i.e., social/psychological) losses, where the core service is flawed or deficient in some way (e.g. a restaurant waiter

was rude when serving the dish) (Driver & Johnston, 2001). Concluded by Smith et al. (1999), outcome failure can be regarded as resource exchange that involves “utilitarian” exchange, whereas the process failure can be regarded as resource exchange that involves “symbolic” exchange (Smith et al., 1999). However, from my perspective, this view is not necessarily true, because that social/emotional loss from process failure also involves utilitarian losses.

It is believed that different types of service failure would arouse different expectations of compensation. Because failures are perceived and stored in different mental accounts---the outcome failure is associated with monetary values whereas process failure is associated with emotional values---so that consumers would expect compensation of the same mental account (Smith et al., 1999; R. H. Thaler, 1999, 2008). In other words, consumers who encounter the outcome failures would weigh the monetary compensation as more important, because outcome failures were attributed to in the economic mental account; whereas consumers who encounter process failure would weigh apology as more important, because the failures were stored in the social mental account. To conclude, consumers will be more likely to expect monetary compensation when encountering outcome failure, and expect apology when encountering process failure. Moreover, monetary compensation should exert bigger influence on consumers’ overall satisfaction and re-patronage intentions in outcome failure, and apology should be more effective in process failure.

2.1.2 Service Failure Paradox

The service failure paradox is defined as a situation where consumers are over-satisfied prior to service failure evaluation, when the recovery performance exceeds their expectation (Matos et al., 2007; Maxham III & Netemeyer, 2002; McCollough, Micheal A. & Bharadwaj, Sundar G., 1992; Smith & Bolton, 1998). The over-satisfaction is so high that it will outperform the situation where no service failure happens. And the over-satisfaction will bring a good opportunity for service

providers to increase their customer retention (Hart et al., 1990). It is based on the comparison between consumers' expectation of recovery effort and their perceptions of the recovery performance. Consumers' expectation would be adjusted to a lower level, due to the previous disappointment with service failure. Once being surprised by the real recovery performance, the over-satisfaction will even exceed the satisfaction when no failure occurs. Over-satisfaction usually leads to a higher level of commitment to the service-provider, and transfers into a higher level of trust (Kau & Loh, 2006), positive word-of-mouth (Kau & Loh, 2006; Matos et al., 2007; Maxham III & Netemeyer, 2002), and greater satisfaction and repurchase intention (McCollough, Micheal A. & Bharadwaj, Sundar G., 1992; Smith & Bolton, 2002).

Moreover, a successful recovery of failure would also generate greater trust (Kau & Loh, 2006; Tax et al., 1998). The service failure paradox has a significant impact on consumer relation management, or the relationship marketing (Magnini, Ford, Markowski, & Jr, 2007). Because the failure would bring out crisis and insecurity for consumers, a good recovery strategy will make consumers more confident in the service-provider again. In addition to trust in the service-provider's willingness to correct the mistake and being able to do so (Matos et al., 2007; Morgan & Hunt, 1994), good recovery can also make consumers to attribute the failure to accidental factors that are irrelevant to the service-providers' ability (Folkes, 1984a; Maxham III & Netemeyer, 2002).

A plausible explanation of the contrast between expectation and real performance was based on the script theory, where people share a common belief---belief that follows a common sequence of acts---in service delivery. When failures that occurred deviate from the predicted script, it would increase consumers' sensitivity to the failure (Bitner et al., 1994).

Much has been discussed about the long-term influence of service failure paradox. Though proved to be effective on consumer's satisfaction in the short term evaluation, questions were raised that service failure paradox provides little help with improving repurchase intentions (Andreassen, 2000; Maxham III James G, 2001; Zeithaml, Berry, & Parasuraman, 1996). The reference point consumers established would help to explain this divergence. The satisfaction is based on the immediate process as well as the rewards provided, which can be easily replaced by the

recovery process. However, the repurchase intention is based on original service provided, which is usually attributed to abilities of service-providers to provide quality services constantly (Matos et al., 2007). Furthermore, it was argued that consumers would establish their cumulative satisfaction and repurchase intention based on the belief of the likeliness of failures to happen again (Smith & Bolton, 1998). The belief is hugely influenced by the service failure paradox as well as the attribution factors. Both issues are major concerns of managers for long-term operation, and the key lies in the process of recovery. However, seldom have studies made a detailed distinction between the kinds of recovery efforts, given the expectation consumers have for different types of failures. Do consumers really care about monetary compensation? Why are some consumers angry about the time-consuming compensation process, instead of the real monetary loss? With the right compensation to meet consumers' expectations, it is possible to win the customer back through service failure paradox.

2.1.3 Second Deviation

Second deviation, or double deviation effect, occurs when the recovery fails to meet consumers' expectations. It is defined as two consecutive unsatisfactory recoveries or following an unsatisfactory recovery in response to a second failure (Bitner et al., 1990; Maxham III & Netemeyer, 2002; McCollough et al., 2000). Consumer dissatisfactions are more sensitive when facing inappropriate complaint responses, which would worsen the situation, leading to negative word-of-mouth, weakened repurchase intention and consumer loyalty.

Different from the service failure paradox, second deviation is influenced by the attribution of failure. A one-time failure can be attributed to accidental factors, such as bad luck. Repeated failures are likely to be attributed to company's inability to provide quality services (Folkes, 1984a; Maxham III & Netemeyer, 2002). The attribution exacerbates consumer dissatisfaction as well as repurchasing intentions. Moreover, it contributes to the adjustment of expectations in the future. The assimilated

expectation means that the future evaluation will be adjusted accordingly, thus leading to a vicious circle (Oliver & Burke, 1999).

2.2 Expectation

Deriving from the discussions of service-failure paradox and second deviation, expectation plays a vital role in how consumers perceive recovery strategies. In the recovery context, expectation established a bridge between people's pre-recovery perceptions and the post-recovery evaluations. In the past literature, satisfaction was regarded as a function of pre-purchase expectations (Bolton & Drew, 1991; Oliver, 1980, 1981). Being different from this research, the expectation was discussed under a general picture, where expectations were held and evaluated around the service itself; rather than the recovery context, where consumers' expectations have already been different due to the service failure.

Discussions about role of expectation follow the assimilation theory in that consumers are thought to respond to desired benefits (Oliver, 1996; Pieters, Koelemeijer, & Roest, 1995). The assimilation theory can be further divided into forward assimilation and backward assimilation. The forward assimilation leads to confirmation bias in that consumers would interpret the outcome in the manner that is consistent with their expectations (Klayman & Ha, 1987). It was confirmed that people would adjust their satisfaction with expectancy levels (Szymanski & Henard, 2001). Backward assimilation indicates the situation where, once people have observed the outcome, recalling inefficiencies will cause the outcome to "play a role in foresight remembrances" (Oliver & Burke, 1999; Pieters et al., 1995). In other words, the consequence of the recovery can be used as basis for consumers' future expectation of the firm's performance. Customer relationship management therefore becomes an important issue in recovery context.

Expectation has a significant influence on satisfaction evaluation. Once created, it would prime consumers to compare it with the real service and affect their satisfaction evaluation (Oliver & Burke, 1999). Furthermore, it is believed that

consumers would increase their satisfaction when their expectations are met or exceeded (Tax, Stephen S & Stephen, 1998).

The mechanism of how expectation influences satisfaction is associated with the phenomenon of expectancy disconfirmation (Bolton & Drew, 1991; Oliver, 1980; Oliver & Swan, 1989). In other words, in the service failure-recovery evaluation process, consumers evaluate the recovery strategy and compare it with their expectations, to see whether the performance is better or worse than their expectations (Oliver & Burke, 1999). Negative disconfirmation results in disappointment, while positive disconfirmation result in delight (Oliver & DeSarbo, 1988). In this study, disconfirmation of the recovery expectation would lead to either greater satisfaction (service failure paradox) or greater dissatisfaction (second deviation).

Besides, the equity theory also helps to explain how expectation alters the satisfaction (Messick & Sentis, 1979; Oliver & Swan, 1989). The modern equity theory involves the comparison of input and outcome. From the consumers' perspective, inputs include time, money, and emotional effort, whereas outcomes involve service performance, the selling and service process, etc. (Oliver & Swan, 1989). Furthermore, different types of resource possessed are involved, consumers are more sensitive to the type of resource exchanged between inputs and outcomes (Alwin, 1987). A fair comparison between inputs and outcomes, on both the amount and the type of resource, leads to the satisfactory evaluation. Thus, expectation alters the balance between inputs and outcome evaluation. Service failure evokes the input that consumers have invested and adjusts their expectation of the upcoming outcome. Outcome of the right type and amount would result in greater satisfaction.

Two arguments arise in the discussion about how effectively the expectation can influence the satisfaction. On one hand, it was suggested that the expectation effect updates along the Bayesian lines (Boulding, Kalra, Staelin, & Zeithaml, 1993; Clow, Kurtz, Ozment, & Ong, 1997). In other words, the influence of expectation will persist over the consumption experience. On the other hand, it was suggested that the influence of expectations should fade out according to the real performance and the disconfirmation (Churchill & Surprenant, 1982; P. G. Patterson, 1993). Or it can be the case that the expectation will adjust according to the real performances.

In this study, we focus on one special kind of expectation: the expectation with service recovery. The expectation with service recovery was defined as consumers' prediction of the extent to which the service-providers can resolve their complaint (Boulding et al., 1993; Oliver, 1996). Given that consumers have invested both money and time in the service process, the expectations of discount rate and apology will be evaluated as the main components of service recovery expectation. Consumer expectation would increase as time expands (Boulding et al., 1993; Grayson & Ambler, 1999). It should be noted that service recovery expectation is influenced by the previous failure. Previous failure serves as a signal for the expectation, as suggested in the forward assimilation theory (Pieters et al., 1995).

2.3 Time vs. Money

As stated in the research question, people have different levels of satisfaction in response to one recovery strategy. We propose that the different satisfaction levels are due to the different expectations that people have. In the consumption experience, consumers invest two kinds of resource at the same time to enjoy the service: time and money. However, previous studies mainly treat money loss as the basis for service failure judgment. In certain consumption experiences, what consumers care was the time lost, rather than the money, because they may weigh time as more valuable than money. However, although weight may be constantly held, they are context-based, where subjects value them differently depending on the situation. As consumers invested the two types of resources at the same time, and both have influence on expectations of recovery strategies, we will discuss their nature and related literature in the following section.

As two of the most commonly held resources, researchers have studied the value of time and money extensively. Both are regarded as utilitarian, not visceral in nature, and ubiquitous in people's day-to-day decisions (Zauberman & Lynch, 2005). In contrast with the nature of money, which people may earn as much as they can, time is a type of resource that is equally held by everyone---everyone has only 24

hours per day. However, people value time differently from money in their decision process. In the classic economics theory, time was evaluated by the opportunity, which is usually assumed as the wage rate (Becker, 1965). However, the opportunity cost theory based on the wage rate is still too vague: the evaluation of time as a kind of resource is context-based, flexible, ambiguous and situational. Even with the use of wage rate, the evaluation of time on the weekends can be different from that during the weekdays (Okada & Hoch, 2004). When it comes to the consumer behavior studies, people are described to have a linear-separable perception of time, where the discrete characters are associated with time, so that it is comparable to other discrete resources such as money (Graham, 1981).

Compared by Soman (2001), that time is distinguished from money in three ways. Firstly, unlike money, time cannot be inventoried or replaced; secondly, time is not as easily aggregated as money; thirdly, accounting for money is a routine activity whereas accounting for time is not. In normal daily life, people constantly use monetary values to make decisions and construct preferences, and generate a relative constant perception of monetary values, whereas the value of time is relatively more vague as well as more elastic. Therefore, unlike money, time resources are easily neglected.

The value of time is malleable and more elastic, comparing with monetary values (Andreassen, 2000; Maxham, 2001; Zeithaml et al., 1996), because the usage of time constantly changes during different contexts (Okada & Hoch, 2004). According to the “elastic justification”, people are more likely to justify their reasoning and choose the option with more elastic attributes attached (Hsee, 1995, 1996). It is why people would feel less guilty when wasting time. Waste of money would arouse more severe perceptions among consumers, comparing with waste of time.

Past literature has investigated people’s perceptions of time vs. money in different realms, including sunk cost and opportunity cost. When dealing with mental accounting where people exhibit the loss aversion and risk aversion, the prospect theory, posit that people who use monetary values would open a transaction-specific mental account on a specific payment, where as close that account on accrual of benefits ((Kahneman & Tversky, 1979); Thaler, 1999). When using time values to

access sunk time costs, it is barely as effective as when using monetary values. Moreover, this ineffectiveness was due to people's difficulty dealing with the accounting of time, rather than people's rational consideration of the past time investment (Soman, 2001). Therefore, people actually are more likely to behave rationally when evaluating the cost of time instead of monetary cost. Moreover, as explained by Okada & Hoch (2004), the reason that people perceive time loss less severe than the monetary loss is because people can better justify time investment. The less sensible character of people's perception over time investment may make failures more acceptable. In other words, the valence of their emotional reactions will be lower for the time investment. However, other researchers have different opinions. For some losing time is more painful than losing money, because time is more fungible than money as the lost time cannot be made up (Leclerc et al., 1995).

Another heuristic bias people exhibit over monetary values is their attitude toward opportunity cost. Anchored by their hourly payment, people tend to underestimate the value of their opportunity cost, leading them willing to work for extra hour even though their willingness-to-pay (WTP) for the extra hour would be much lower than the hourly wage (R. Thaler, 1980; , 1999). Moreover, consumers are more likely to display the risk-seeking behaviors when they pay with time in ex ante decisions, because the greater ambiguity would make people perform better in the task (Okada & Hoch, 2004).

When facing future investment decisions, why would people have such a preference? As a different kind of resource, time will be discounted steeper when one is in a state of deprivation, and the propensity to discount delayed expenditures is greater for time than for money (Loewenstein, 1996). Therefore, people would also present steeper discounting for future investments of time than money, and prefer present investment more (Zauberman & Lynch, 2005). Hence an alternative with monetary gain as well as time loss would be more attractive in the distant future. Moreover, people are more likely to focus on monetary rewards, and overlook the time cost when considering future decisions.

Recent studies, however, have suggested the opposite tendency over values of time vs. money. Monetary decisions would be less consistent comparing with time decisions, as the affective processing would influence the preference stability (Lee et

al., 2009). Being sensitive to monetary values would drive people to make more analytical deliberation, and making people more vulnerable to cognitive noise (Lee et al., 2011). To the contrary, the time values would evoke more emotional responses, and encourage more personal connection with products, especially when the product is experiential (Mogilner & Aaker, 2009), whereas spending money would be less personal comparing with spending time (Reed et al., 2007). However, as mentioned by Soman (2001), people can be irrational. By educating them on the economic value of time, people may pay more attention to the sunk cost when spending time.

To conclude, as two resources that were both invested by consumers, time share different natures with money, such as time is more elastic than money on value-judgment (Hsee, 1996, 1997), and time is more emotional/experience attached than money do (Lee et al., 2011; Mogilner & Aaker, 2009). However, in the service failures' perspective, the most often mentioned time-/money – related discussion was about the delayed compensation and time-money trade-off in association with the satisfaction (e.g. Smith et al., 1999). Barely had researchers to associate the time/money framing with the perception of service failure, and to discuss its impact on perceived recovery strategies, and it is what we are going to do in this thesis.

CHAPTER 3 RESEARCH FRAMEWORK AND HYPOTHESES DEVELOPMENT

Based on the literature review and discussions, we propose the following theoretical framework to investigate the effects of service recovery strategies on consumer satisfaction and re-patronage intention (Figure 1). First, we propose that recovery strategies have a direct effect on consumer satisfaction, which partially mediates the relationship between recovery strategies and re-patronage intention. More importantly, we posit that consumer expectation mediates the relationship between recovery strategies and satisfaction. However, the type of resource (time vs. money) expectations and the type of service failure (outcome vs. process failure) moderate the relationship between expectation and satisfaction.

In the following section, we draw from the expectation disconfirmation theory and the resource exchange theory to elaborate the relationships among variables and the hypotheses.

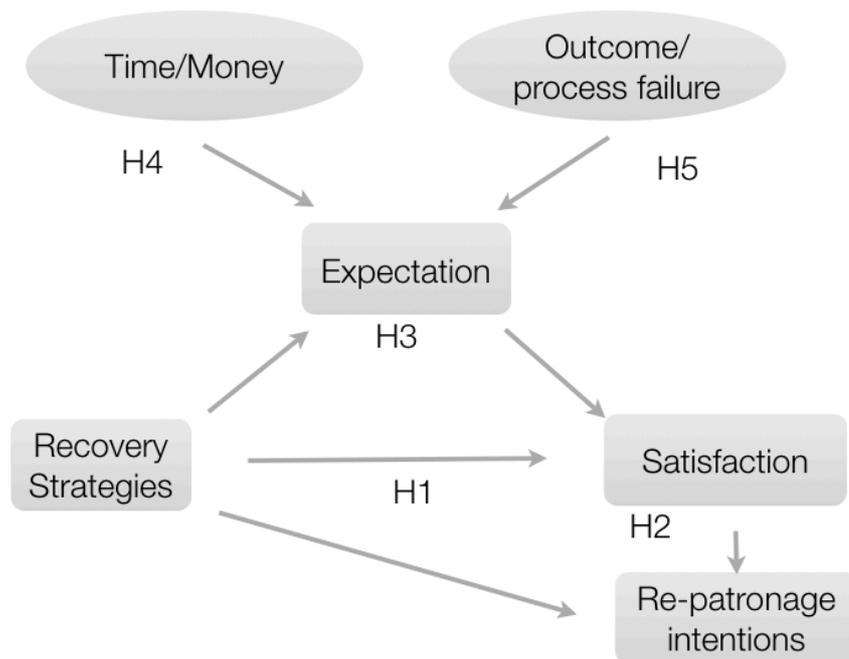


Figure 1 Conceptual Framework

3.1 The Main Effect of Recovery Strategy and Mediating Role of Satisfaction

Before introducing the key concept of expectation, the main effect should be stated firstly. Regardless of what or how much consumers expect, their overall satisfaction serves as the main function of the recovery strategies.

Discount and apology are considered as the most two important strategies in the service recovery literature (Chan & Wan, 2008; Maxham, 2001; Smith & Bolton, 1998; Smith et al., 1999). Discount is regarded as the “most important recovery dimension” for service failure recovery (Tax et al., 1998), whereas the apology was considered as a valuable reward that compensates self-esteem (Walster, Berscheid, & Walster, 1973). Apology helps to enhance the post-recovery satisfaction, because it provides the concerns, effort, and empathy that consumers expect to see on the part of service providers (Hart et al., 1990; Kelley, Hoffman, & Davis, 1993). In this thesis, a strong recovery strategy refers to either high discount rate or sincere apology, whereas a weak recovery strategy refers to either low discount rate or insincere apology.

As the indicator of post-choice evaluation of certain purchase and consumption experiences, satisfaction has been the most often used concept in studying consumers' perception of services (E. W. Anderson, Fornell, & Lehmann, 1994; Parasuraman et al., 1985). Consumers' intentions to participate in following consumption activities depend on their previous satisfaction with the consumption experiences (Oliver, 1980). However, although an important indicator of consumers' attitudes towards the service and service-providers, satisfaction itself is often perceived as the “consumer's fulfillment response”, rather than the attitude (Oliver, Rust, & Varki, 1997). Therefore, consistent with the previous literature, we expect the same kind of the main effect from recovery strategy on consumer satisfaction, in that the valence of specific recovery strategy would have a direct impact on the level of consumers' satisfaction.

H1: Comparing with weak recovery strategies, strong recovery strategies would lead to greater consumer satisfaction.

Furthermore, consumer satisfaction is generally considered as a signal or even a cause for the future behavioral intentions, in this case, the re-patronage intentions. In some studies, consumers would perceive the failure as a clear signal to lower their re-patronage intentions (Folkes, 1984b, 1988; Smith & Bolton, 1998). Satisfaction with service recovery adjusts consumers' re-patronage intentions (LaBarbera & Mazursky, 1983). The relationship is especially clear when consumers are facing the same firm for and repeated services (E. W. Anderson et al., 1994; Churchill & Surprenant, 1982; Oliver & DeSarbo, 1988). Whereas for the transaction-specific dissatisfaction, or the service recovery satisfaction in this paper, we propose that satisfaction with service recovery serves as an important mediator between recovery strategies and re-patronage intentions (Bitner, 1990; Smith & Bolton, 1998).

H2: The overall satisfaction mediates the relationship between recovery strategy and re-patronage intentions.

Since the strong recovery strategy can bring greater satisfaction and re-patronage intentions, why would we want to consider the effect of expectation? Firstly, it is unlikely for service-providers to have unlimited resource to compensate consumers, especially when facing a service failure with plenty complaints. Therefore, it is important to considering what consumers expect exactly so as to maximize their satisfaction with limited resources. Secondly, even if service-providers offer very high compensation, e.g. full refund as suggested in the beginning of the paper, some consumers may still be dissatisfied---not because they are not compensated enough, but they are expecting different type of recovery effort.

In the following section, we will discuss the role of expectation and how it affects consumers' satisfaction and re-patronage intention.

3.2 The Mediation Role of Expectation Discrepancy

To answer the question “why people’s level of satisfaction is different given the same compensation?”, we need to look into the role of expectation. As discussed in the previous chapter, the watershed point of service failure paradox and second deviation lies in the expectation of consumers. The discrepancy between expectation and the real recovery compensation mediates the effect of recovery strategies, and shifts consumers’ satisfaction and re-patronage intention.

In modern service market, good compensation strategy should adopt both monetary compensation as well as apology. Why are some consumers still unhappy, leading to the second deviation? Why are other consumers over-satisfied, resulting in the service failure paradox? The key lies in whether the recovery strategy can match consumers’ expectation of service recovery effort.

There is no doubt that consumers are more likely to be satisfied when recovery strategies are consistent with their expectations. However, the consistency” can be defined from two different perspectives. First, the right type of recovery strategy should match the expectation. Dissatisfaction occurs sometime not because the compensation was not enough, instead, it was because the compensation was not the right type as consumers have expected. Second, the right amount of recovery effort should match the expectation as well. As suggested by the disconfirmation theory (Bolton & Drew, 1991; Oliver, 1980; Oliver & DeSarbo, 1988), consumers would be satisfied when recovery effort meet their expectation. Consumers may be over-satisfied when compensation positively disconfirms their expectation.

Influenced by the different levels of expectation in terms of discount and apology, consumers may rate recovery strategies differently. Consumers expect compensation after complaining about the failure, materially or emotionally. In

association with the service failure paradox and the second deviation, recovery effort in light of consumer expectation may lead to three outcomes: it fails to meet (second deviation) or it may meet, or exceed consumer expectation (service failure paradox). If their expectation were met, they would show satisfaction and perhaps re-patronage intentions. When recovery effort exceeds their expectation, consumers would be over-satisfied. If recovery effort failed to meet their expectation, they would be angrier than when failure occurs the first time, thus leading to less satisfaction. Therefore, hypotheses based on the disconfirmation theory of expectation (Bolton & Drew, 1991; Oliver, 1980; Oliver & Swan, 1989; Tse & Wilton, 1988) should apply to the context of service failure recovery.

The disconfirmation theory suggest that expectation, performance, and expectation disconfirmation together serve as predictors of satisfaction (Oliver, 1980; Oliver & Burke, 1999; Pieters et al., 1995; Tse & Wilton, 1988). In the past literature, satisfaction was either a direct function of recovery strategy or mediated by expectation disconfirmation. Some reported the performance-only result (Cronin & Taylor, 1994), while others found expectation disconfirmation only (Oliver, Balakrishnan, & Barry, 1994). Several studies found the effect of both variables on satisfaction (Patterson, Johnson, & Spreng, 1997). In this paper, based on the expectation disconfirmation theory, we would explore the mediating role of expectation discrepancy, in the relationship between recovery strategy and overall satisfaction.

H3a: In the recovery of service failure, when the compensation fails to meet consumers' expectation, consumers' overall satisfaction will be lower, comparing with that when the expectation is met;

H3b: When the compensation exceeds consumers' expectation, consumers' overall satisfaction will be higher, comparing with that when the expectation is met.

3.3 Framing effect of Past Resource Spent

However, what do consumers expect exactly? The mere monetary compensation for their monetary loss? Or simply a personal and sincere apology for their emotional loss? The expectation is not a constant variable that remains unchanged. It can be influenced by several factors, especially the type of resource and the type of failure.

Since consumers invest both time and money in service consumption, it is vital to know the type of criterion, which consumers adopt to evaluate their losses. If the loss is evaluated in terms of monetary value, consumers would be more sensitive to monetary compensation. On the other hand, if the loss is measured in terms of time, consumers should be sensitive to emotional compensation, such as an apology.

Given that consumers may use either money or time as a heuristic to process the information related to their loss and evaluate the recovery effort, consumers' evaluation of recovery strategies may be altered based which type of resource is used to prime consumers. The activation of one heuristic will make it easier for consumers to emphasize certain type of recovery effort (Oliver & DeSarbo, 1988). Therefore, when consumers are reminded of the sunk cost of money, they are more likely to use this heuristic to evaluate the recovery strategy. In this case high monetary compensation would be expected and give consumers greater satisfaction in post-recovery evaluation. On the other hand, when consumers are reminded of opportunity cost of time, they are more likely to bring up time-related concept when evaluating the recovery strategy. Given the emotional loss associated with time, sincere apologies should help to alleviate such loss and lead to greater post-recovery satisfaction.

Support from these propositions can also be found in the resource exchange theory in that people prefer resource exchanges of the same category. In other words, satisfaction is greater when resources from the same/similar categories are exchanged than when resources from different categories are exchanged (Brinberg & Wood, 1983; Foa et al., 1992; Smith et al., 1999). Under the framework of resource

exchange theory, the relative attractiveness of different resources were examined across several factors such as the culture (Chan & Wan, 2008), gender, and life stage (Foa et al., 1992). In the same vein, service failure and recovery strategies can be treated as a kind of resource exchange. Consumers would expect to be compensated in the same kind of resource as that lost in the service failure or framed by the researcher or manager.

Moreover, it is believed that the monetary loss and time loss are attributed using different mental accounts, which consumers rely on consistently to make their decisions (Thaler, 2008). Monetary loss from the service failure is processed through the mental account of economic resources, thus monetary compensation shall be expected. On the other hand, the time loss from service failure will be measured through the mental account of emotional/social resources, thus the social compensation such as apologies shall be expected. Once such expectation is met, consumers shall be satisfied or even over-satisfied with the recovery strategy.

Comparing to monetary value, the time value is more personal. The usage of time resource would evoke more emotional responses and establish more personal connection with a product, especially when the product is experiential (Mogilner & Aaker, 2009). Therefore, since services are usually experiential oriented, the effect of time value shall be more obvious when it is perceived as loss of time. When the loss is framed in time value, the vague and elastic character of time would activate consumers to recall this criterion to evaluate the loss. Once activated, consumers are more likely to use it as the criterion to evaluate the compensation. In such cases, apologies are more important for their general satisfaction and repurchase intention.

Since people may use both the monetary value and time as the evaluation criteria, it is difficult to isolate the monetary compensation from the apologies. For different reasons, service-providers may adopt one or the other strategy. If service-providers can anticipate what consumers expect, they can be more effective in their recovery strategies while minimizing the risk of second deviation.

H4a: the impact of time/money framing on expectation

Regarding the effect of the type of resource on expectation, consumers with failure evaluated in monetary (time) values will expect higher monetary-compensation (apology).

H4b: the impact of time/money framing on post-recovery evaluation

Regarding the effect of the type of resource on the post-recovery evaluation, consumers with failure evaluated in monetary (time) values will be more likely to be satisfied with monetary compensation (apology).

3.4 The Influence of Failure Type

In addition to the kind of resource spent, the failure type is another factor that may influence consumers' expectation. In different types of service failure, consumers would emphasize different aspect of the loss they suffered, and expect different recovery effort. On top of that, from the perspective of service-providers, the failure type provides a simpler criterion for devising their recovery strategy, depending whether it is an outcome failure or a process failure. An outcome failure refers to the physical/instrumental outcome loss, where the service providers fail to fulfill the basic service needs, or fail to perform the core service (e.g. a restaurant fails to serve the dish ordered). Process failure refers to the invisible (social/psychological) losses, where the core service is flawed or deficient in some way (e.g. a restaurant waiter was rude when serving the dish) (Driver & Johnston, 2001; Smith et al., 1999).

Therefore, different types of service failures would evoke different expectations from consumers. Because the failures are perceived and stored in different mental accounts: the outcome failure is associated with monetary values so

that the monetary compensation is expected, whereas the outcome failure is associated with emotional values, thus an apology is expected (Thaler, 1999, 2008). Consumers would always expect compensation with the same type of resource or mental account. In other words, consumers who encounter the outcome failure would be more sensitive to monetary compensation, because outcome failure is processed using the economic mental account; whereas consumers who encounter process failure would be more sensitive to apology, because process failures accessed using the social/emotional mental account.

The resource exchange theory also lends support to the arguments. The satisfaction is greater when resources from the same/similar categories are exchanged than when resources from different categories are exchanged (Brinberg & Wood, 1983; Foa et al., 1992; Smith et al., 1999). The outcome failure stresses loss in monetary value, therefore the monetary compensation, will be expected and will lead to greater satisfaction. On the other hand, process failure stresses emotional loss. Thus, apologies to compensate for the same type of resource will be appreciated.

Therefore, we propose that consumers would expect stronger apology for process failures, while they would expect more monetary compensations for outcome failures. In other words, recovery strategies that match consumer expectations would lead to greater satisfaction.

H5a: The impact of failure type on expectation:

Consumers in process (outcome) failure will expect more sincere apology (higher monetary-compensation).

H5b: The post-recovery evaluation:

Consumers in process (outcome) failure will be more likely to be satisfied with apology (discount compensation).

In the next two chapters, we present two studies to test above hypotheses separately. The first study aims at testing the main effects indicated in H1. The mediating effects of satisfaction (H2) and expectation discrepancy (H3) are also tested in study one. The first study 1 also tests H4, where the resource spending of time/money would shift expectations accordingly. A study of 2 (resource invested: time vs. money) by 2 (monetary compensation: high vs. low discount) by 2 (apology: strong vs. weak apology) between subjects factorial design is adopted. Study 2 aims to test H4 and H5, where the resource type (time vs. money) and failure type (outcome vs. process failures) would influence consumers' expectation, therefore to adjust their overall satisfaction and re-patronage intention towards one single recovery strategy. Thus, study two adopts a 2 (time vs. money) by 2 (process vs. outcome failure) between subjects design.

CHAPTER 4 STUDY ONE: THE ROLE OF RECOVERY STRATEGIES AND EXPECTATION DISCREPANCY

4.1 Design of Study 1

As argued by Smith et al. (1999), recovery is triggered by service failure. Therefore, systematic empirical research would be difficult to conduct in either laboratory or field environments. Most previous studies of service failure were done through either the recall of a failure event or imaginary scenarios. In this study, we adopt imaginary scenarios. In the study one and study two, subjects were asked to read a story of service failure, imagine their feelings, and give their subjective ratings of the recovery strategies.

A questionnaire-based experiment was designed to test hypotheses 1 and 2. It was a 2 (resource invested: time vs. money) by 2 (monetary compensation: high vs. low discount) by 2 (apology: strong vs. weak apology) between subjects factorial design. To include resource of time/money in manipulation had two purposes. First, we want to test H1, H2 and H3 at the same time, so study 1 can be regarded as a pre-test for study two. Second, we want to adjust expectation to different levels, instead of focusing on a constant value so that, variance of expectation valence can help to test its mediation effect on recovery strategies and overall satisfaction as well as re-patronage intention.

In study one, a restaurant service-failure scenario was created: an outcome failure where the consumers' desired dish could not be provided. Subjects were asked to rate their subjective perceptions and predict their expected recovery level based on the scenario described. And the follow-up recovery compensation were given after the evaluation, in combination of high/low discount rate and strong/weak

apology levels, consumers will be asked to rate their satisfaction, re-patronage intentions, WOM, and other related questions.

4.1.1 Design of Scenarios

The two levels of currency used were consistent with the one adopted by Okada & Hoch (2004): time vs. money. Subjects would be paid HK\$200 for a 4-hour data-entry work, on a wage rate of HK\$ 50/hour, which fits the regular wage rate paid for part-time student at a Hong Kong university. In the money condition, students were told that they spent HK\$200 for a dinner for two in a fancy restaurant; whereas in the time condition, students were told that they spent 4 hours doing a data-entry job as a research assistant, and paid with a dinner for two in a fancy restaurant. There are minor differences in the decision context. In the money condition, the dinner was subtly regarded as subjects' own choice, whereas in the time condition, it was not their decision. No significant differences were detected in the previous study (Okada & Hoch, 2004). In other words, the decision context has no impact on customer satisfaction or overall happiness level.

The first study was based on the scenario used by Smith et al. (1999). Originally, both the outcome failure and process failure were manipulated based on scenarios of restaurant and hotel services, with high and low magnitudes regarding to the severity level. In this study, we only used the high magnitude of outcome failure in the restaurant. Considering the cultural background differences, it is uncertain that whether it will be perceived as a severe and reasonable failure by Hong Kong subjects. Certain minor changes were made to some minor details, making it more relevant to Hong Kong subjects.

Scenario: You and another person go to the restaurant for dinner to celebrate a special occasion.

You are seated at your table. The waiter comes to take your order. You place your order. The waiter informs you that the restaurant is out of the entrée you selected.

You make another selection. Ten minutes later, the waiter comes to inform you that the restaurant is also out of your second choice of entrée. At last, you were forced to choose one that you do not want very much.

The service recovery manipulation from Smith et al. (1999) was used. It perfectly fits the restaurant scenario above, because the model was originally established on scenarios of services provided by restaurants and hotels.

The compensation was originally divided into 3 levels: high, medium and low, using the manipulation of “you are given a 50% / 20% off / no discount of your total bill”. In order to distinguish the effect, the medium manipulation is skipped. Only the high (50% off discount) and low (no discount) is adopted.

The apology manipulation is divided into two categories: strong vs. weak. The strong apology will be framed as “a personal letter with your name mailed to your private address, it clearly defined the problem with full responsibility undertaken by the restaurant.” The weak apology will be simply “sorry” stated by the waitress.

4.1.2 Measurement Scales

Customer’s expectation was evaluated through subjective evaluation before they are informed of the recovery strategies. Subjects were asked to rate their expectation: their general expectation, expectation of discount rate and expectation of apology sincerity. The later two were evaluated on a 100-point scale, where subjects can fill in a number between 0-100 as they desire: a 0-100% off discount of the total bill for the expected discount rate; and a 0-100 sincerely apology level

(where 0 represents the least sincere apology that subjects can imagine, and 100 represents the most sincere apology that they can imagine) for the expected apology sincerity. The 100-point scales were used to differentiate the seven-point scale, in order to avoid the impact they have on the subsequent recovery procedures evaluation (seven-point scale). On top of that, a seven-point Likert scale question adapted from (Oliver & Swan, 1989) was asked after the presentation of recovery strategies, with “Much worse than expected” and “Much better than expected” anchored at endpoints, and “As expected” anchored in the middle.

These questions served two purposes for the measurement of expectation. On one hand, these two manipulations can help evaluate consumers’ general expectation jointly. On the other hand, the gaps between the original evaluation and the rating of recovery strategies can help to expectation discrepancy and whether it leads to the service failure paradox or the second deviation.

The general satisfaction and the likelihood of re-patronage are measured using direct questions on a seven-point Likert scale with “extremely satisfied” (“extremely likely”) and “extremely dissatisfied”(“extremely unlikely”) anchored at the endpoints. The satisfaction questions included general satisfaction, satisfaction with the discount and satisfaction with the apology. These three questions consist a scale to evaluate consumer’s overall satisfaction.

Finally, the subjective perception over the value of time/money was rated as a control variable, based on a seven-point scale with “extremely valuable”/“not valuable at all” anchored at endpoints. Besides, subjects who were primed with time investment were asked to write down how much 4-hours are worth for them in terms of HK Dollars. The subjects who were primed with monetary investment were asked to write down how many hours the HK\$ 200 is worth in their perceptions. Background questions were asked to control the sample, including age, gender, major, years in school, and monthly family income.

4.1.3 Pre-test 1: Manipulation Check and Questionnaire Design

Study 1 aimed to test the mediating role of expectation discrepancies and how people perceive the recovery strategies performed by service-providers. In addition, the influence of time vs. money was also scrutinized in this study. Considering the uncertainty of perceived value equivalence between time and money and the perception differences caused by culture factors, a pre-test was conducted to check the manipulations prior to the study 1. Forty-three undergraduate students from Lingnan University were invited to fill-in the questionnaires. The questionnaires were distributed in classrooms after the lecture. Eight conditions were randomly distributed between the subjects. Because the pre-test aimed to evaluate the time-money equivalence values as well as the effectiveness of discount/apology manipulation, at least 20 subjects can be guaranteed for each cell for a single two-factor manipulation,. The descriptive data of subjects and its corresponding percentage were listed in Table 1 below.

Table 1 Subject Description of pre-test 1

	Value	Frequency	Percentage %
Gender	Female	26	60.5
	Male	17	39.5
Age	19-21	19	44.2
	22-24	20	46.5
	25-26	3	7.0
	Missing	1	2.3
Nationality	China	25	58.1
	French	1	2.3
	German	3	7.0
	HK	10	23.3
	Korea	2	4.7
	Canada	1	2.3
	Missing	1	2.3

	Value	Frequency	Percentage %
Average	Below HK\$ 10,000	4	9.3
Monthly	HK\$ 10,000 ---30,000	19	44.2
Family	HK\$30,000 --- 100,000	15	34.9
Income	Above HK\$ 100,000	1	2.3
	Missing	4	9.3
Total		43	100

For the time-money investment equivalence, it was estimated that 1 hour equals to HK\$80, after ruling out outliers and missing values. Instead of spending HK\$ 200 on the money condition, HK\$ 320 was used for study 1.

To check the resource spent of time-money manipulation on the expectation levels, an independent two-sample t-test was conducted. With equal variance assumed ($F(43,2) = .42, p > .5$), the expected apology sincerity level for time- and money-spent was significantly different ($M_{\text{time}} = 75.42, M_{\text{money}} = 60.63; t = 2.1, p < .05$). Although the expected monetary discount was not significant at 0.05 level (with equal variance assumed ($F(43,2) = 2.47, p > .05; M_{\text{time}} = 29.47, M_{\text{money}} = 44.17; t = -1.84, p = .07$), the data confirmed the weakly-significant difference between time- and money-spent, which can be further enhanced via larger sample size and the modification of the money-time exchange.

The manipulation of high/low discount of monetary compensation and strong/weak apology was checked. To examine the high/low discount manipulation, the overall post-recovery satisfaction as well as the discount satisfaction was evaluated. The overall satisfaction of higher discount compensation was weakly significantly higher than that of low discount condition: with equal variance assumed ($F(43, 2) = 0.56, p > .5$), $t = 1.86, p = .07$ ($M_{\text{high}} = 4.74, M_{\text{low}} = 3.75$). There is no significant difference in the discount-satisfaction: $t = 1.02, p = .31$ ($M_{\text{high}} = 4.78, M_{\text{low}} = 4.35$), with equal variance assumed ($F(43,2) = 1.70, p > .05$). The weak significance of overall satisfaction and the insignificance of discount satisfaction were limited by the sample size.

To examine the strong/weak apology manipulation, we used the overall post-recovery satisfaction and the apology satisfaction to evaluate its valence. Both satisfactions were significantly higher with strong apology: for the overall satisfaction, $t = 3.31, p < .01$ ($M_{\text{high}} = 5.15, M_{\text{low}} = 3.52$), with equal variance assumed ($F(43, 2) = .22, p > .5$); for the apology-satisfaction, $t = 2.91, p < .05$ ($M_{\text{high}} = 5.00, M_{\text{low}} = 3.74$), with equal variance assumed ($F(43,2) = .32, p > .5$). Therefore, it is viable to continue using the high/low discount rate and the strong/weak apology manipulation as stated in the 4.1.1.

4.1.4 Questionnaire Modification

The time-money equivalence assumed in the scenario design did not work well in pre-test 1. Based on the subjects' estimation, an hour was perceived equals to HK\$80 by students in Lingnan University. Therefore, in the updated version of money-spent condition, subjects would be told that "you decided to spend HK\$320 to have dinner for two at a fancy restaurant". The time-spent condition kept unchanged.

Another concern arose from the weak-/non-significant differences of post-recovery satisfaction on discount rates. Though it can be enhanced with larger sample size, the way in which questions were framed can be difficulty for Hong Kong students to comprehend and rate them accurately. The questions were re-phrased in a more straightforward manner based on feedback from the subjects.

4.2 Results of Study 1

The study 1 aims to confirm the main effect indicated in H1, H2 and H3, where the recovery strategies influence the satisfaction and re-patronage intentions. This effect shall also be mediated by expectation discrepancy. Study 1 also serves as a pre-test for H4, where the resource spent in terms of time and money would change

the expectation of discount rate and apology sincerity. A questionnaire-based 2 by 2 by 2 study was conducted among students in Lingnan University. Total 201 students participated in the study. They were required to read a scenario stated on the questionnaire and to rate their subjective feelings accordingly.

4.2.1 Description of Subjects

This study was conducted in the classroom at either beginning or ending of the class, when students could concentrate on the task. The between-subject design requires subjects to only evaluate one scenario with only one combination of recovery strategies. The subjects were randomly assigned to one of eight conditions.

Preliminary data analysis techniques such as Box-plot and Histogram were used to scrutinize each variable in Study 1. After eliminating outliers and missing variables, 188 valid responses were retained for the data analysis. Basic background information such as age, gender, and family income, and their corresponding percentages are listed in Table 2.

The sample of study 1 was consistent with that of pre-test 1. From the sampling method's perspective, the student subjects were both recruited from the undergraduate lecture rooms at Lingnan University. From the data, the Chinese (including HK) subjects consist of 81.40% of the subjects in the pre-test and 88.30% in study 1. The percentage changes were statistically insignificant. Because modifications were made to the questionnaire, it would be hard to compare other subjective ratings between pretest 1 and study 1.

Table 2 Subjects Description of Study 1

	Value	Frequency	Percentage %
Gender	Female	105	55.9
	Male	61	32.4
	Missing	22	11.7

	Value	Frequency	Percentage %
Age	18-21	93	49.5
	22-25	84	44.7
	26-29	9	4.8
	Above 29	1	.5
	Missing	1	.5
Nationality	Canada	1	.5
	China	138	73.4
	France	3	1.6
	Germany	1	.5
	HK	28	14.9
	Japan	1	.5
	Korea	6	3.2
	Malaysian	1	.5
	Spain	1	.5
	Sweden	1	.5
	UK	4	2.1
	US	2	1.1
	Missing	1	.5
Average	Below HK\$ 10,000	45	23.9
Monthly	HK\$ 10,000 ---30,000	81	43.1
Family	HK\$30,000 --- 100,000	33	17.6
Income	Above HK\$ 100,000	9	4.8
	Missing	20	10.6
Total		188	100

4.2.2 Manipulation and Assumption Check

One of the main aims in study one was to see how loss framed in time/money would influence people's expectations and their perceptions of recovery strategies. The expectation of discount rate and apology levels were examined separately. An independent two-sample t-test was conducted after checking normality. Comparing

with people who spent money, people who spent time expected significantly lower discount ($M_{\text{time}} = 31.82$, $M_{\text{money}} = 39.84$; $t = -2.54$, $p < .05$), and expected significantly stronger apology ($M_{\text{time}} = 75.05$, $M_{\text{money}} = 65.38$; $t = 2.01$, $p < .05$). It was confirmed that people who spent money during consumption would expect higher monetary compensation prior to recovery, and people who spent time would expect strong apology prior to recovery.

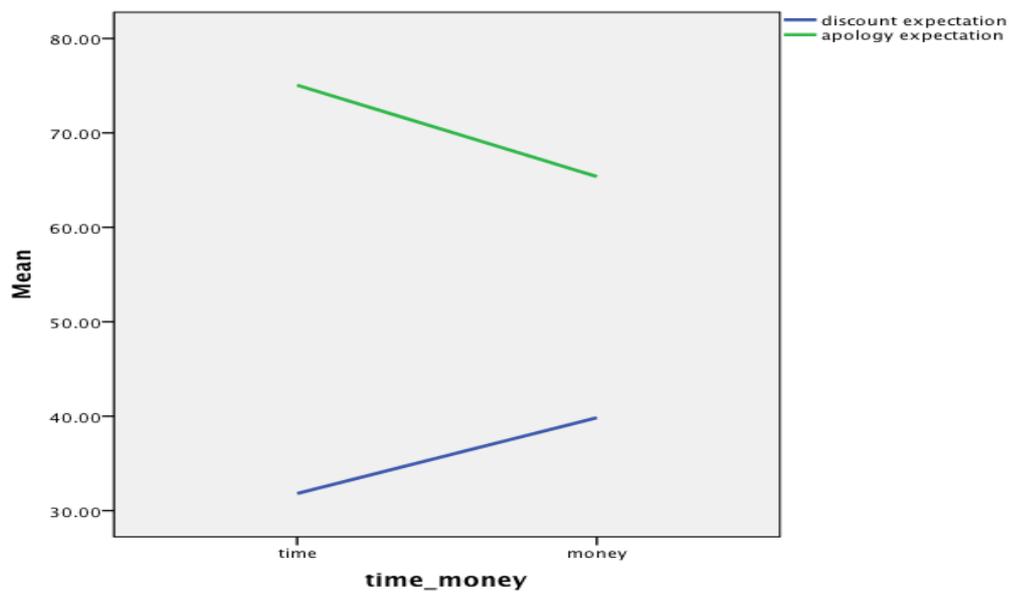


Figure 2 Mean Interactions of Expectation and Resource Spent

To check the effectiveness of manipulation of high/low discount rate and strong/weak apology, the overall satisfaction, discount-satisfaction and the apology-satisfaction were scrutinized. Independent two-sample t-tests were conducted. For the high/low discount rate manipulation, the overall satisfaction with high discount rate was significantly higher than that with low discount rate (with equal variance assumed: $F(188,2) = 3.11$, $p = .08$, $t = 9.38$, $p < .001$); and the discount-satisfaction of high discount rate was also significantly higher than that of low discount rate (with equal variance assumed: $F(188, 2) = 2.08$, $p > .1$, $t = 8.12$, $p < .001$). For the strong/weak apology manipulation, the overall satisfaction was significantly higher when the apology was strong than when apology was weak ($t = 5.85$, $p < .001$, the

equal variance cannot be assumed: $F(188,2) = 6.84, p = .01$; so is the apology-satisfaction (equal variance assumed: $F(188,2) = 1.86, p = .17, t = 5.68, p < .001$). Therefore, the manipulation of high/low discount rate and the strong/weak apology was successful based on the post-recovery evaluation.

Consistent with the pre-test, the time/money spent had no influence on the perceived severity of the accident. Interestingly, it contradicted the previous finding that people who spent money would perceive the loss more severe than people who spent time (Okada & Hoch, 2004). Moreover, loss in time/money has no influence on emotional reactions of subjects after the failure, including the anger and extent to which their dignity was hurt. Although the loss in time should have caused more emotional attachment and clues (Lee et al., 2009, 2011), how they were evaluated and applied to service failure recovery should be further considered. The detailed reasons shall be discussed in the discussion chapter. Mean scores and standard deviation are reported in Table 3.

Table 3 Mean Scores of Variables in Study 1 (non-significant)

	Time	Money
Perceived Severity	4.49 (1.44)	4.76 (1.29)
Anger	4.90 (1.44)	5.17 (1.06)
Dignity Hurt	3.96 (1.60)	4.02 (1.27)

To evaluate consumers' general overall satisfaction precisely, the general satisfaction, discount satisfaction and the apology satisfaction were asked as a cohesive scale (7-point Likert scale). With Cronbach's Alpha of .86 across all conditions, the Cronbach's Alpha of .85 for time-spent group, and .86 for money-

spent group, the overall satisfaction was computed by the mean score of the general satisfaction, discount satisfaction and the apology satisfaction.

4.2.3 Descriptions of Dependent Variables under Manipulations

H3 aims to see how discrepancies between expectation and real compensation mediate the recovery strategy and satisfaction/re-patronage intentions. In order to evaluate consumers' satisfaction accurately, the overall satisfaction, discount-satisfaction and the apology satisfaction were evaluated. Detailed mean scores with standard deviations across different conditions are presented in Table 4. The correlations of these 3 variables, as well as the re-patronage intentions are listed below in Table 5.

Table 4 Means Comparison between Discount Rate at Different Apology Levels and Resource Spent (Study 1)

		Time		Money	
		High discount	Low discount	High discount	Low discount
Satisfaction	Strong apology	5.64* (1.47)	3.82* (1.37)	5.69* (1.38)	4.61* (1.44)
	Weak apology	5.05* (1.36)	2.48* (1.24)	4.64* (1.56)	2.00* (0.93)
Discount satisfaction	Strong apology	5.36* (1.52)	3.48* (1.34)	5.46* (1.17)	4.13* (1.49)
	Weak apology	5.33* (1.59)	3.65* (1.92)	5.05* (1.46)	3.08* (1.38)
Apology satisfaction	Strong apology	5.56* (1.45)	4.26* (1.29)	5.27 (1.31)	4.78 (1.31)

Overall satisfaction	Weak apology	4.48* (1.36)	3.43* (1.41)	4.50* (1.50)	2.96* (1.40)
	Strong apology	5.52* (1.39)	3.86* (0.86)	5.47* (1.20)	4.51* (1.17)
Re-patronage	Weak apology	4.95* (1.13)	3.19* (1.27)	4.73* (1.37)	2.68* (1.00)
	Strong apology	4.64 * (1.85)	2.57* (1.34)	4.12 (1.40)	3.70 (1.36)
	Weak apology	3.48 * (1.47)	2.39* (1.12)	3.82* (1.50)	2.50* (1.25)

NOTE: Means are shown with standard deviations provided in parentheses.
 * Indicates mean difference is significant at 0.05 level (2-tailed).

Table 5 Correlation Matrix of DVs in Study 1

	1	2	3	4
<i>Resource spent: time</i>				
1. Satisfaction	1			
2. Discount Satisfaction	.578**	1		
3. Apology Satisfaction	.660**	.583**	1	
4. Re-patronage Intentions	.705**	.572**	.566**	1
(N=93)				
<hr/>				
	1	2	3	4
<i>Resource spent: money</i>				
1. Satisfaction	1			
2. Discount Satisfaction	.751**	1		

3. Apology Satisfaction	.708**	.767**	1	
4. Re-patronage Intentions	.572**	.596**	.634**	1
(N=95)				

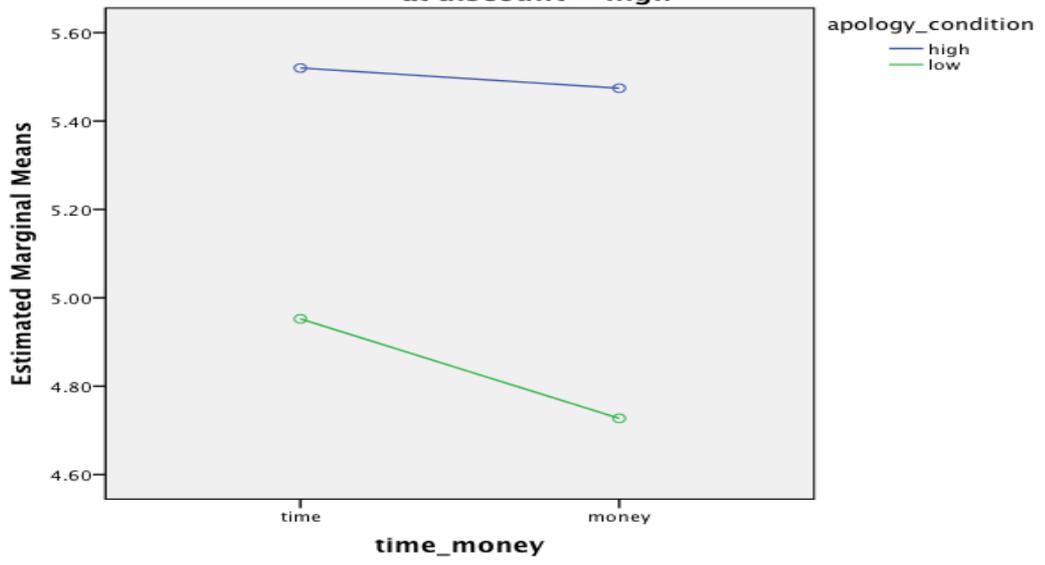
** . Correlation is significant at the 0.01 level (2-tailed).

It should be noticed that the re-patronage intention has a significant correlation with consumer's general satisfaction across eight conditions ($r = .67$, $p < .001$). As discussed in the second chapter, effective recovery can help enhance consumer satisfaction, but does not necessarily help with repurchase intention (Andreassen, 2000; Matos et al., 2007; Maxham III James G, 2001; Zeithaml et al., 1996). This result helps to refute this argument, and provides good news to service-providers. If the recovery is satisfying enough, it can help to retain consumers in the long term.

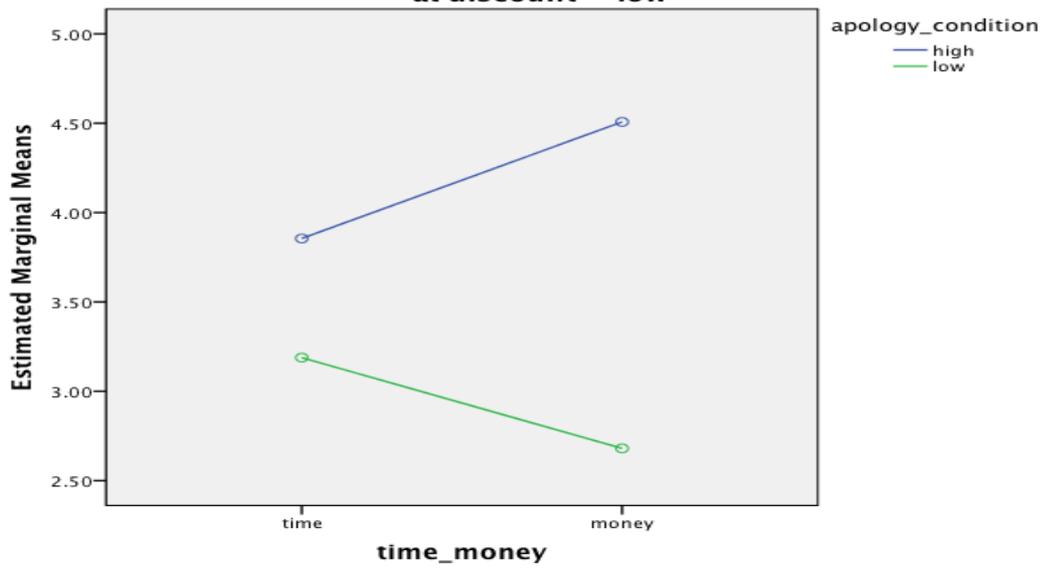
Besides, the private and public WOM were evaluated in the questionnaire, it had no significant differences over the main manipulation of discount conditions ($t_{\text{private}} = .63$, $p = .53$; $t_{\text{public}} = -.51$, $p = .61$) and the apology conditions ($t_{\text{private}} = 2.01$, $p = .5$; $t_{\text{public}} = .13$, $p = .89$). Since the WOM was not a major consideration in this study, we will not discuss it here.

The three-way ANOVA was used to see how these three factors influence subjects' overall satisfaction and repurchase intentions. The interactions of the resource spent (time/money), discount rate, and the apology sincerity are presented in Figure 3. The discount rate and the apology sincerity had significant influence on both overall satisfaction ($F_{\text{discount}}(1, 186) = 85.79$, $p < .001$; $F_{\text{apology}}(1, 186) = 29.97$, $p < .001$) and the re-patronage intentions ($F_{\text{discount}}(1, 186) = 34.24$, $p < .001$; $F_{\text{apology}}(1, 186) = 11.44$, $p = .001$). The resource spent of time/money has no direct effect on overall satisfaction and re-patronage decisions.

**Estimated Marginal Means of overall_satisfaction
at discount = high**



**Estimated Marginal Means of overall_satisfaction
at discount = low**



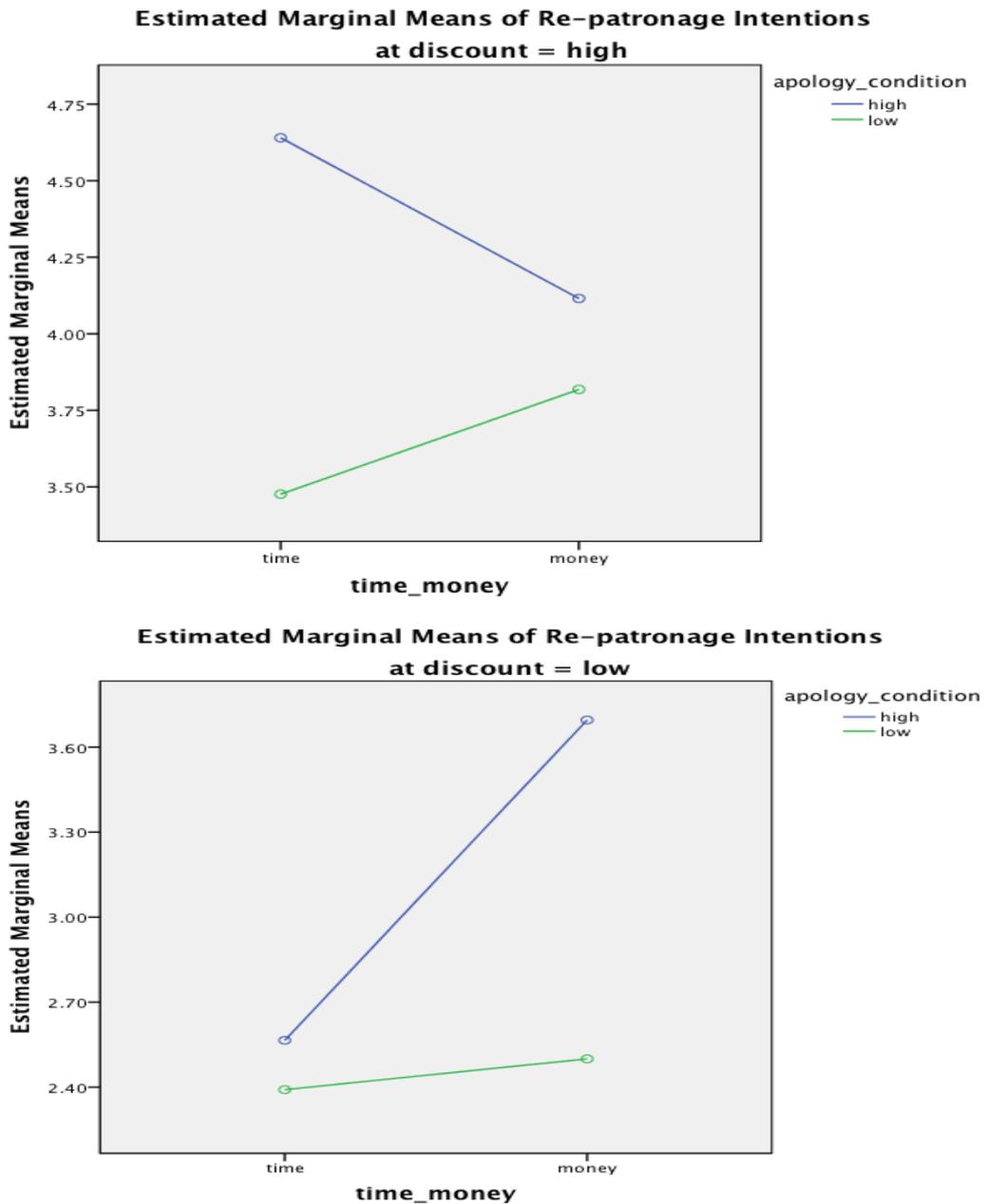


Figure 3 The Interaction Time/Money Spent, Discount Rate and Apology Sincerity Intention in Study 1 (Overall Satisfaction and Re-patronage)

It is apparent that the subjects are not sensitive to apology when the discount rate is high. This suggests the spillover effect of high discount rate. In other words, when the discount rate is high enough, people will treat the recovery strategy as sincere, regardless of how apologies are made.

Originally, the expectations of discount rate and the apology sincerity were evaluated via a 0-100 scale. To evaluate the expectation discrepancies, following procedures were done. Firstly, the expected discount rate and the apology sincerity are deducted from the real discount rate and apology sincerity across different conditions. Secondly, in order to analyze the mediating effect, the discount and apology discrepancies were converted into ordinal variables by their trisection points. The conversion was based on the percentage description of frequencies, and the boundary values (discount rate: 5, 30; apology sincerity: 30, 60) were labeled as missing value. The “high” group represents the situation when the expectation is higher than the recovery compensation, standing for the second deviation (Maxham III & Netemeyer, 2002). On the other hand, the “low” group represents the situation when the expectation was exceeded by the recovery compensation, referring to the service failure paradox (Matos et al., 2007; Maxham III & Netemeyer, 2002; McCollough, Micheal A. & Bharadwaj, Sundar G., 1992; Smith & Bolton, 1998).

It should be noted that the directions of the mean scores on the discount expectation and apology expectation were opposite, influenced by the resource spent of time/money ($t_{\text{discount exp}} = -1.94, p = .05$; $t_{\text{apology exp}} = 2.25, p < .05$). Therefore, the expectation and its corresponding discrepancy should be discussed separately: rather than together.

The converted expectation-real discrepancies have significant influence on the overall satisfaction and the re-patronage intentions. One-way ANOVA was used. For the discount expectation-real discrepancy, $F_{\text{overall-satisfaction}}(2, 182) = 36.88$ ($p < .001$), and $F_{\text{re-patronage}}(2, 182) = 14.21$ ($p < .001$). For the apology expectation-real discrepancy, $F_{\text{overall-satisfaction}}(2, 182) = 21.53$ ($p < .001$), and $F_{\text{re-patronage}}(2, 182) = 6.2$ ($p < .05$).

4.2.4 Hypotheses Testing

4.2.4.1 MANOVA and Main Effect

The MAOVA procedures were used to see the main effects, for we had more than one dependent variable: overall satisfaction and the re-patronage intention. Though influenced by satisfaction, the re-patronage is still a function of the recovery strategies, therefore, it was demonstrated as a parallel dependent variables the overall satisfaction. The normality distribution of DVs was checked with histograms and boxplots. Scatter plots were used to exam the nonlinear relationship between DVs. Equal variance of DVs were checked among different groups with Box's Test ($F = .96, p > .5$).

The recovery strategies, discount and apology, both had significant main effect on satisfaction ($F_{\text{discount}} = 80.86, p < .001$; $F_{\text{apology}} = 30.00, p < .001$). It confirms H1, while the recovery strategies have main effect on overall satisfaction.

The main effect of discount/apology expectation-real discrepancy (referred as "expectation" in Table 6 and following discussion), discount rates and apology sincerity was significant on the overall satisfaction and the re-patronage intention. For the compensation strategies, the discount rate has Pillai's Trace = .09, Wilks' Lambda = .91, Hotelling's Trace = .09; and the apology sincerity has Pillai's Trace = .21, Wilks' Lambda = .79, Hotelling's Trace = .27. The discount expectation has Pillai's Trace = .07, Wilks' Lambda = .93, Hotelling's Trace = .07; and the apology expectation has Pillai's Trace = .08, Wilks' Lambda = .92, Hotelling's Trace = .08.

It is interesting to see discount expectation has weak significant influence on the re-patronage intentions ($p = .55$), though the overall satisfaction is sensitive to the discount expectations. The apology expectation plays an important role in interfering with the re-patronage intensions. Besides, being different with the overall satisfaction, which is affected by the compensation strategies, the re-patronage intentions involve the evaluation of the failure itself (Matos et al., 2007). Therefore, although the discount was satisfying, it is possible that consumers are still concerned with the possibility of similar accidents to happen again, thus, leading to lower re-patronage intentions.

Table 6 MANOVA Results of Study 1

Independent variables	Main effect	Df1	Df2	F Value	P Value	Partial eta squared	Wilks' lambda
Discount expectation		3	174	2.71	< .05*	.03	.93
Apology expectation		3	174	3.04	< .05*	.04	.92
Discount rate		2	175	41.62	< .001**	.32	.68
Apology		2	175	13.03	< .001**	.13	.86
Effects on separate dependent variables							
Discount expectation	Overall satisfaction	2	175	3.51	< .05*	.04	
	Re-patronage	2	175	.60	.55	.01	
Apology expectation	Overall satisfaction	2	175	3.35	< .05*	.04	
	Re-patronage	2	175	5.68	.004**	.07	
Discount rate	Overall satisfaction	1	176	80.86	< .001**	.32	
	Re-patronage	1	176	31.59	< .001**	.15	
Apology	Overall satisfaction	1	176	30.00	< .001**	.13	
	Re-patronage	1	176	11.22	.001**	.05	

* Indicates significant at .05 level. ** Indicates significant at .005 level.

4.2.4.2 Mediating Effect of Satisfaction on Recovery Strategy and Re-patronage Intention

It was indicated in the last section that the recovery strategies have a significant main effect on re-patronage intention ($F_{\text{discount}} = 31.59, p < .001$; $F_{\text{apology}} = 11.22, p = .001$). In this section, we will discuss the mediating role played by overall satisfaction on re-patronage intentions.

The 3-steps simple OLS regression was conducted to test the mediating effect of satisfaction on the recovery strategy and re-patronage intentions (Table 7). It can be observed that the regression of recovery strategy (discount and apology) on re-patronage intentions as well as overall satisfaction was significant. However, when controlled for the mediator, the regression of recovery strategy on re-patronage intentions was insignificant. Therefore, it can be verified that the overall satisfaction fully mediated the effect of recovery strategy on re-patronage intentions.

This result further confirmed the importance of recovery strategy and consumer satisfaction as stated in the work of Craighead, Karwan, & Miller (2004). Since re-patronage intention indicates consumers' behavioral intentions, and further signals consumers' loyalty, how recovery would influence consumers' relationship with service-provider rest on how satisfied consumers are with the recovery strategies. When service-providers face limited budget and a limited set of recovery strategies, how to maximize consumers' satisfaction would be crucial. We will discuss this issue in the following section.

Table 7 Mediating Test of Overall Satisfaction on Recovery Strategy and Re-patronage Intention

	DV	Predictor	B	t-value	p-value
Step 1	Re-patronage intention	Discount	-.40	-5.82	< .001***
		Apology	-.23	-3.19	< .01**

Step 2	Overall satisfaction	Discount	-.62	-10.57	< .001***
		Apology	-.41	-6.13	< .001***
Step 3	Re-patronage intention	Discount	.03	.49	.62
		Overall satisfaction	.70	10.08	< .001***
	Re-patronage intention	Apology	.06	1.01	.32
		Overall satisfaction	.70	11.74	< .001***

** Indicates significant at 0.01 level *** Indicates significant at 0.001 level

4.2.4.3 Mediating Effect of Expectation Discrepancy

As proposed in H3, how the same compensation strategy would cause different satisfaction levels depends on the mediation effect of expectation discrepancy. In this section, we discuss how expectation discrepancy mediates consumers' perceptions on the compensation strategy.

As discussed in the literature, the watershed between service failure paradox and second deviation lies on the expectation. The mechanism of expectation disconfirmation, in other words, the discrepancies between expectations and the real recovery strategies, leads to consumers' overall satisfaction and re-patronage intentions changes. Here we examine the mediation effect of expectation.

The 3-step simple OLS regression was used to test the mediating effect of discount/apology expectation discrepancies over the relationship between recovery strategy and overall satisfaction. Detailed regression results are exhibited in Table 8. ANOVA was used to examine how the discrepancies between the expectation and compensation influence the overall satisfaction and re-patronage intention (Figure 4).

Since the recovery strategy includes both discount and apology, the expectation was also divided into discount expectation and apology expectation.

Therefore, we will test the mediating effect twice, one for discount expectation discrepancy and another for the apology expectation discrepancy. For the mediating effect of expectation discrepancy, it partially mediated the discount rate and overall satisfaction. When controlling the discount expectation discrepancy, the absolute value of coefficient decreased from .62 to .48. However, for the apology expectation discrepancy, because the regression of apology expectation on apology was insignificant, it is hard to say the apology expectation discrepancy mediates the recovery strategy and overall satisfaction. The insignificant mediating effect was possibly due to the spillover effect of the high discount rate, as the apology satisfaction indicated significant differences in response to the high/low discount strategies ($M = 4.74$ & 3.77 , $t = 4.44$, $p < .001$), and the regression of discount strategy on apology expectation discrepancy was significant (coefficient $Beta = .67$, $t = 12.17$, $p < .001$). It further indicates the significance of the recovery performance itself.

The expectation discrepancy was divided into low/medium/high 3 categories corresponding to 3 situations: the real recovery strategy exceeds/meets/fails to meet the expectation. It was divided in corresponding to the definition of service failure paradox and second deviation. The “low” group refers to the situation when the expectation was exceeded by the recovery compensation---service failure paradox; and the “high” group refers to the situation when the expectation was failed to meet by the recovery compensation---second deviation. The “medium” group stands for the normal situation that the compensation basically meets the expectation

Suggested in Figure 4, the corresponding means of the interaction between expectation and recovery strategies are shown, with overall satisfaction and the re-patronage intention as DVs. For the discount expectation and discount rate interaction, the results on overall satisfaction support the H3 when the discount rate was high. It was highest when the expectation was exceeded by the recovery strategy, and lowest when recovery strategy fails to meet the expectation. When discount rate was low, the overall satisfaction was kept constant. The re-patronage intentions only had significant improvement when the expectation was exceeded. At a low discount rate, although the overall satisfaction and re-patronage intentions

were slightly higher when the recovery compensation was made at the same level as the expectation, the mean difference was not significant.

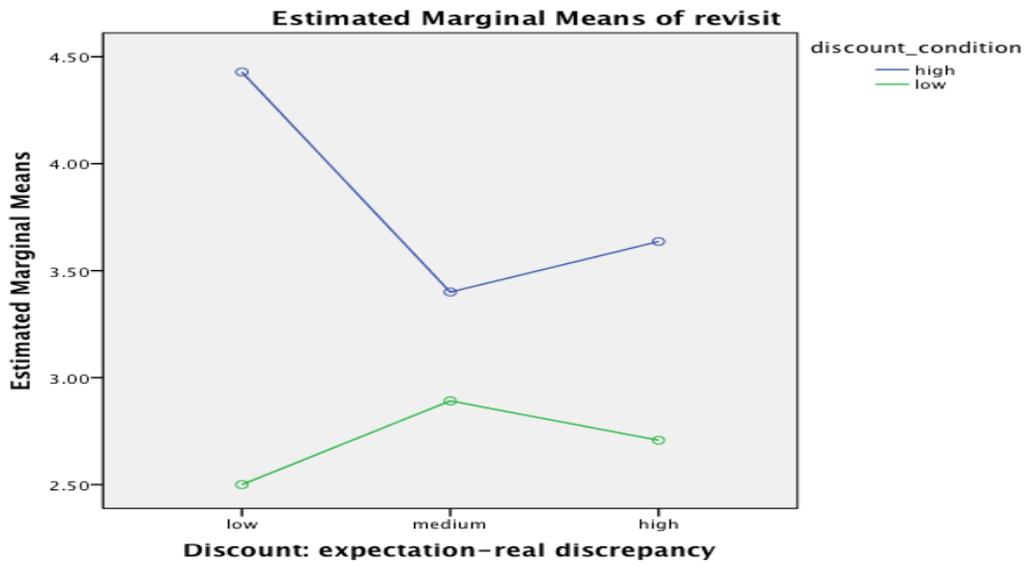
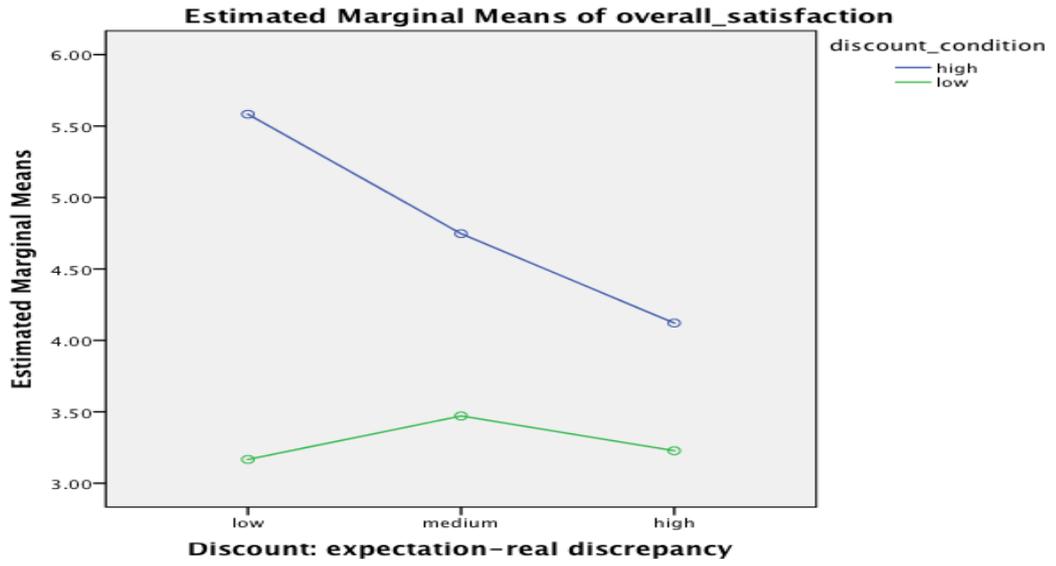
For the apology expectation and the apology sincerity interaction, the results on overall satisfaction support the hypotheses as well. Subjects indicated over-satisfaction when the expectation was exceeded. They indicated lower satisfaction when the compensation fails to meet the expectation. The re-patronage intention was less sensitive to the interaction; it was low only when the compensation cannot meet the expectation.

As indicated in H2, the re-patronage intention was fully mediated by the overall satisfaction. It is possibly that the re-patronage intention did not respond to the recovery strategies as well as the overall satisfaction did. Moreover, it helped to explain the argument about whether the service failure paradox would enhance re-patronage intention. The overall satisfaction was the consequence of the joint work between recovery strategy and the expectation discrepancy. Re-patronage intention was fully mediated by the satisfaction---meaning that the power of recovery strategy was limited. Furthermore, when evaluating re-patronage intentions, consumers would take the original service failure into consideration, where as the overall satisfaction would be evaluated based on the recovery strategies only (Matos et al., 2007).

Table 8 Mediation Effect of Expectation Discrepancy

	DV	Predictor	B	t-value	p-value
Step 1	Overall satisfaction	Discount	-.62	-10.57	< .001***
		Apology	-.41	-6.13	< .001***
Step 2	Discount Expectation Discrepancy	Discount	.55	8.97	< .001***
	Apology Expectation Discrepancy	Apology	.02	.28	.78
Step 3	Overall satisfaction	Discount	-.48	-7.05	< .001***
		Discount expectation Discrepancy	-.25	-3.74	< .001***
	Overall satisfaction	Apology	-.40	-6.78	< .001***
		Apology expectation Discrepancy	-.43	-7.19	< .001***

*** Indicates significant at 0.001 level



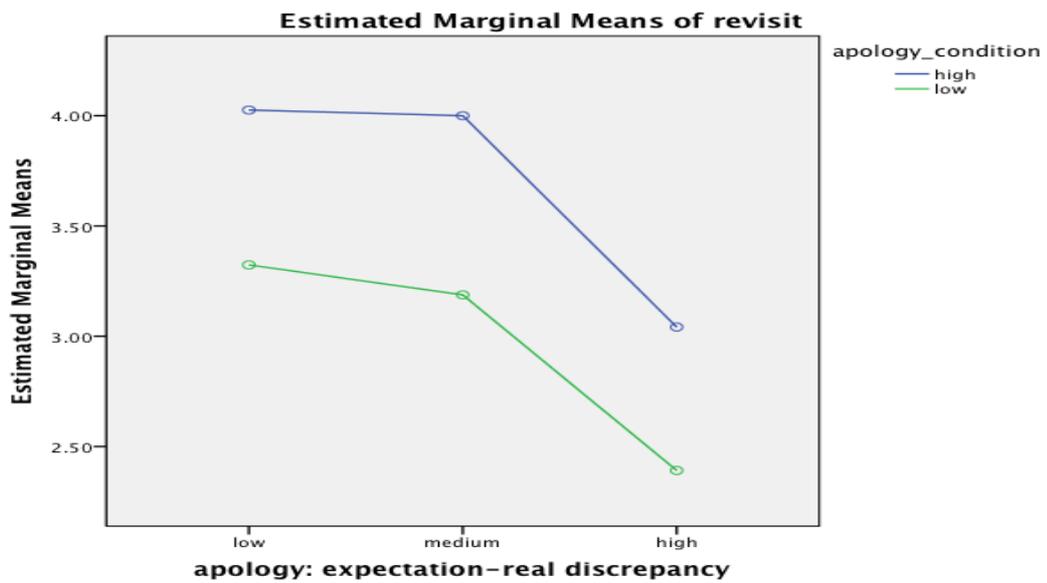
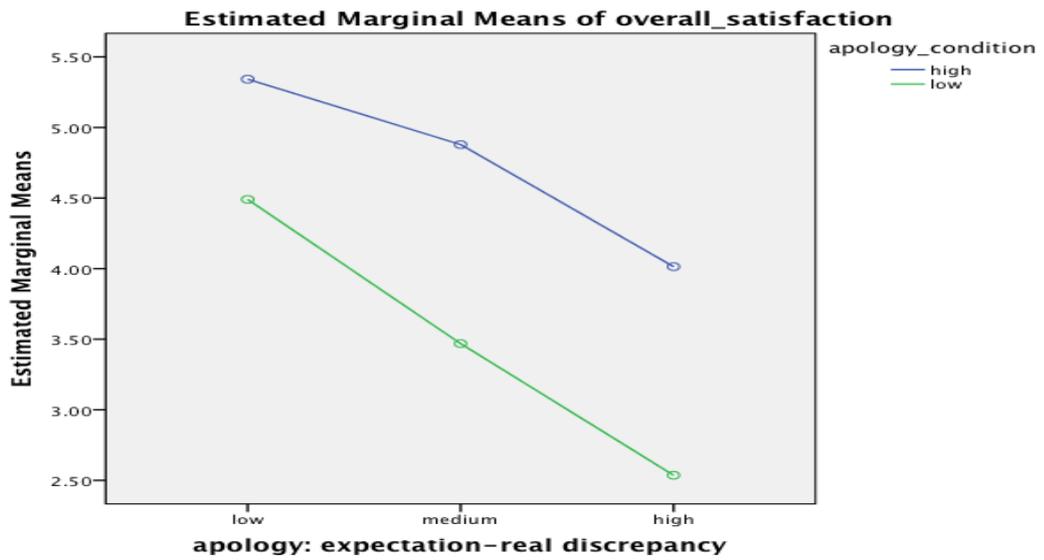


Figure 4 Mean Interactions between Expectation Discrepancy, Discount Rate and Apology Sincerity

4.2.4.4 Resource Spent of Time/Money on Expectations of Recovery

By focusing on resource spent in terms of time/money in study one, we have two objectives. First, we aim to verify H1, H2 and H3 in the same study, and to conduct a pre-test for H4, which is to be tested in study two. Second, we can

manipulate the level of expectation so that the expectation can have different levels rather than being constant around the one value. In this session, we will discuss the results regarding to how well these two aims were achieved.

The H4a can be firmly confirmed by comparing subjects' ratings of the expected discount score and expected apology sincerity. As stated in the manipulation description section, it was certain that subjects who spent time in the service failure would expect significantly lower discount rate ($M_{\text{time}} = 31.82$, $M_{\text{money}} = 39.84$; $t = -2.54$, $p < .05$), and significantly higher apology sincerity ($M_{\text{time}} = 75.05$, $M_{\text{money}} = 65.38$; $t = 2.01$, $p < .05$). Therefore, the expectation of discount rate and apology sincerity did have significant differences in terms of the resource spent of time/money. When people spent time, the sincere apology was highly expected. When people spent money, the good discount rate was highly expected.

However, the resource spent in terms of time/money has insignificant influence on consumers' overall satisfaction ($F(2, 182) = .89$, $p = .41$). On one hand, it was due to the dominant effect of discount rate and apology sincerity. On the other hand, the overall satisfaction was derived through the means score of general satisfaction, discount satisfaction and the apology satisfaction, and the later two are in opposite directions on time/money manipulations, which shall be discussed in study 2.

The mediating role played by expectation discrepancy under time-/money-conditions was exhibited in Table 9. The result is similar to what was indicated in the general discussion in that discount expectation discrepancy partially mediated the relationship between recovery strategy and overall satisfaction, when consumers were framed with either time or money. Moreover, the apology expectation discrepancy has no significant mediating effect under both conditions.

It is interesting to note that discount rate and expectation interaction play a more important role in time condition, rather than money condition. It is possible that subjects hold higher apology expectation and lower discount expectation in the time condition. Therefore, the subjects can be over-satisfied with the discount rate when what their expectation is low. They may be factitious in responding to the apology when their expectation is high.

Table 9 Mediating Effect of Expectation When Spent Time/Money

<i>Time</i>	DV	Predictor	B	t-value	p-value
Step 1	Overall satisfaction	Discount	-.69	-8.96	< .001***
		Apology	-.34	-3.47	.001***
Step 2	Discount Expectation Discrepancy	Discount	.68	8.70	< .001***
	Apology Expectation Discrepancy	Apology	-.02	-.17	.86
Step 3	Overall satisfaction	Discount	-.52	-5.16	< .001***
		Discount expectation Discrepancy	-.24	-2.40	.01**
	Overall satisfaction	Apology	-.35	-4.24	< .001***
		Apology expectation Discrepancy	-.52	-6.21	< .001***
<i>Money</i>					
Step 1	Overall satisfaction	Discount	-.54	-6.16	< .001***
		Apology	-.49	-5.29	< .001***
Step 2	Discount Expectation Discrepancy	Discount	.43	4.59	< .001***
	Apology Expectation Discrepancy	Apology	.06	.58	.57
Step 3	Overall satisfaction	Discount	-.43	-4.58	< .001***
		Discount expectation Discrepancy	-.25	-2.64	.01**
	Overall satisfaction	Apology	-.46	-5.45	< .001***
		Apology expectation Discrepancy	-.33	-3.90	< .001***

* Indicate significant at .05 level

**Indicate significant at .01 level

***Indicate significant at .001 level

CHAPTER 5 STUDY 2: THE EFFECT OF RESOURCE TYPE AND FAILURE TYPE

5.1 Study Design

According to hypotheses 2 & 3, both the resource spent of time/money and the failure type would exert significant influence on expectation of recovery compensation, which in turn affect the overall satisfaction and re-patronage intentions. For study 2, we adopt a 2 (resource spent of time vs. money) by 2 (process vs. outcome failure) design to study the effect of these two factors and how they influence the expectation.

Meanwhile, we use the same one compensation strategy consistently across all conditions to see how the overall satisfaction and re-patronage intentions would respond to the changes of expectation.

Two restaurant service-failure scenarios were created. For outcome failure, consumers' desired dish could not be provided. In the case of process failure, the waiter showed bad attitude while serving food. The subjects were asked to rate their perceptions and predict their expected recovery level based on the described scenario. The recovery strategy was presented after they have completed the evaluations. Then, consumers were asked to rate their satisfaction, re-patronage intentions, WOM, and other related questions.

5.1.1 Scenario Designs

For the resource of time vs. money, the same manipulation from study one was used: with one hour equals to HK\$80. The same manipulation was used in the work of Okada & Hoch (2004). In the money condition, students were told that they spent HK\$320 for a dinner for two in a fancy restaurant; whereas in the time condition, they were told that they spent 4 hours doing a data-entry job as a research assistant and paid with a dinner treat for two in a fancy restaurant.

The outcome failure and process failure were based on the scenarios adopted by Chan et al. (2008) & Smith et al. (1999). Considering the cultural traditions of Hong Kong subjects, certain modifications were made. Five Hong Kong undergraduate students were invited as the focus group to discuss the scenario and provided certain opinions. The modified scenarios were as follows:

Process failure:

You and another person go to the restaurant to celebrate a special occasion.

After seated, you asked to take the order, but the waiter made you waited for 10 minutes before taking your order. The waiter did not refill your water while you were eating, and forgot to bring you drinks ordered. And he finally offered you the drink after you urged for 3 times.

Outcome failure:

You and another person went to the restaurant to celebrate a special occasion.

After you placed order, the waiter informed you that the restaurant was out of the entrée you selected. You made another selection. 10 minutes later, the waiter came to inform you that the restaurant was also out of your

2nd choice of entrée. At last, you were forced to choose one that you did not want at all.

Again, the compensation strategy consisted of discount and apology. In response to the research question at the beginning of this thesis, only one set of compensation strategy was given. Considering the reality issue, the manipulation was set as follows. The discount rate was described as “10% off the total bill”. The apology was described as “restaurant manager approached you, expressed the inconvenient situation. On behalf of the waiter, the restaurant manager apologized to you with several ‘sorry’.”

5.1.2 Measurement Scales

The expectation, overall satisfaction and re-patronage intentions evaluations were the same as they were in study 1. The manipulation check of process failure and outcome failure was the scale developed by Chan & Wan (2008). The questions were modified from the works of Brady & Jr., (2001); Hui, Zhao, Fan, & Au (2004). The scale was more simple and effective than the original one, with only 4 questions to evaluate whether the service has provided ideal outcome or indicated good attitude. two questions were used to measure outcome failure and process failure respectively. One of the questions is reversely coded (Appendix III Q6-9). A ten-point Likert scale was used, with extremely agree/disagree anchored at the endpoints.

For the expectation, subjects were required to evaluate their expectation of discount rates and apology sincerity on a 100-point scale: 0-100% of the total bill and a 0-100 in terms of sincere apology level (where 0 represents the least sincere apology that subjects can imagine, and 100 represents the most sincere apology that they can imagine).

The general satisfaction and the likelihood of re-patronage were evaluated through direct questions via a seven-point Likert scale with “extremely satisfied” (“extremely likely”) and “extremely dissatisfied”(“extremely unlikely”) anchored at the endpoints. The general satisfaction, discount satisfaction and the apology satisfaction were used to measure the overall satisfaction.

The dignity/respect questions were asked both before and after the imagined recovery effort on a seven-point Likert scale with “totally (hurt)/extremely respected” and “not at all” anchored at the endpoints. For the WOM, because it had a very weak effect in study one, only a direct question of WOM was asked in study two: on a seven-point Likert scale with “extremely likely” and “extremely unlikely” anchored at the endpoints.

The subjective perception of the value of time and money was rated as a control variable, based on a seven-point scale with “extremely valuable”/“not valuable at all” anchored at the endpoints. Background questions include age, gender, nationality, and monthly family income.

5.1.3 Pre-test of Study 2 and Manipulation Check

Study two aims to examine how resource type (time/money) and failure type (process/outcome failure) influence subjects’ expectations on recovery strategies and how they further influence satisfaction and re-patronage intention. The pre-test of study two aims to explore how well the time-money equivalence works and whether the process failure and outcome failure manipulations are perceived at the same severity level.

Forty-six students from the SPEED community college of Polytechnic University of Hong Kong were invited to do the pre-test of study two. The questionnaires were distributed inside the classroom during the class break. The students were required to fill in the questionnaire quietly in the classroom. Four

conditions were randomly distributed between the subjects. The descriptions of subjects in pre-test 2 were listed below:

Table 10 Subject Description of pre-test 2

	Value	Frequency	Percentage %
Gender	Female	34	73.9
	Male	12	26.1
Age	19-21	21	45.7
	22-24	20	43.5
	25-26	4	8.7
	Missing	1	2.2
Nationality	China	25	54.3
	Hong Kong	18	39.1
	Missing	1	2.3
Average	Below HK\$ 10,000	16	34.8
Monthly	HK\$ 10,000 ---30,000	16	34.8
Family	HK\$30,000 --- 100,000	12	26.1
Income	Above HK\$ 100,000	0	0
	Missing	2	4.3
Total		46	100

For the manipulation of time/money resource, the expectation of discount rate and apology sincerity were scrutinized. For the time condition, the expected discount rate was significantly lower than that of the money condition ($M_{\text{money}} = 58.70$, $M_{\text{time}} = 41.74$; $t = -2.12$, $p < .05$), and the expected apology sincerity was significantly higher than that of the money condition ($M_{\text{money}} = 70.87$, $M_{\text{time}} = 80.43$; $t = 2.02$, $p < .05$).

For the scenario construction of process failure and outcome failure, the perceived severity between outcome failure and process failure was kept at the same level ($M_{\text{outcome}} = 4.96$, $M_{\text{process}} = 5.23$; $t = .59$, $p = .56$). After re-coding the reversely coded questions, the Cronbach's Alpha was .76 for the outcome failure and .86 for process failure. In the process failure condition, subjects rate the process failure significantly more severe than that of the outcome failure ($M_{\text{outcome}} = 4.94$, $M_{\text{process}} = 5.73$; $t = 6.15$, $p < .001$). In the outcome failure condition, subjects rate the outcome failure significantly more severe than that of the process failure ($M_{\text{outcome}} = 7.35$, $M_{\text{process}} = 4.94$; $t = -3.11$, $p < .001$). Therefore, the manipulation of outcome and process failure was successful.

The manipulations of resource spent on time/money and failure type were successful through the pre-test. No modifications were needed.

5.2 Results of Study 2

With established main effect that expectation mediating the recovery strategy and overall satisfaction/ re-patronage intentions, study two aims to confirm H4 and H5 in that the resource spent of time/money and the failure type would adjust the mediator: expectation, which in turn would affect the overall satisfaction and re-patronage intention. A 2 (time vs. money) by 2 (process vs. outcome failure) study was conducted with 151 students from the Polytechnic University of Hong Kong and the City University of Hong Kong. They were required to read the scenarios carefully, imagine their feelings and give their subjective ratings of the questions accordingly.

5.2.1 Description of Subjects in Study 2

Ninety-nine students from SPEED community college of the Polytechnic University of Hong Kong and 52 undergraduate students from the City University of Hong Kong were invited to participate in this study. Students were required to fill-in the questionnaire carefully in the classroom, either during session break or before the lecture. The 4 conditions were randomly distributed between the subjects. After eliminating outliers and blank responses, 145 effective responses were retained. Detailed descriptions of subjects are listed below:

Background information of subjects in study two is consistent with that in pre-test 2. The subjects were mainly selected from HK universities, thus they share similar background. Moreover, 93.48% of the subjects were from China (including HK) in pretest 2. The number reached 94.48% in study 2. Thus, there is no significant difference between the two samples.

Considering that cultural differences may affect consumers' tolerance and perceived severity of service failures (Chan & Wan, 2008), geographical differences between the two studies need to be examined. Based on the Z-score comparisons, the percentage differences of Chinese subjects were marginally significant ($p = .051$). However, since the scenario used in study 1 was treated as the "outcome failure" in study 2, the perceived severity can be compared across studies. The difference in perceived severity was statistically insignificant between study 1 and 2 ($M_1 = 4.63$, $M_2 = 5.00$, $t = -1.58$, $p = .12$), indicating that the geographical differences of subjects in study 1 and 2 casted no influence on their ratings. In other words, the comparability of study 1 and 2 can be verified.

Table 11 Subject Descriptions of Study 2

	Value	Frequency	Percentage %
Gender	Female	92	63.4
	Male	48	33.1
	Missing	5	3.4
Age	19-22	106	73.1
	23-26	34	23.4

	Value	Frequency	Percentage %
	Above 27	5	3.4
Nationality	China	82	56.6
	HK	55	37.9
	Italy	1	.7
	UK	1	.7
	US	1	.7
	Missing	5	3.4
Average	Below HK\$ 10,000	41	28.3
Monthly	HK\$ 10,000 ---30,000	61	42.1
Family	HK\$30,000 --- 100,000	32	22.1
Income	Above HK\$ 100,000	3	2.1
	Missing	8	5.5
Total		145	100

5.2.2 Manipulation Checks

For the time and money manipulation, the expected discount rate and the expected apology sincerity were scrutinized. Before conducting the independent two-sample t-test, both expected values were checked for normality distribution, and the expected discount rate was reversely recoded. For the expected discount rate, subjects who spent money expected significantly higher discount rate than subjects who spent time ($M_{\text{money}} = 47.83$, $M_{\text{time}} = 39.57$, $t = -1.99$, $p < .05$). For the expected apology sincerity, subjects who spent money expected significantly lower apology sincerity than subjects who spent time ($M_{\text{money}} = 65.20$, $M_{\text{time}} = 75.43$, $t = 3.32$, $p = .001$). The manipulation of time and money was successful. The influence on expected recovery strategies coincides with the result in study 1, thus confirmed the statement in H4.

For the failure type manipulation, both the expected discount rate/apology sincerity and the scale of manipulation check were examined. For the expected discount rate, subjects expected significantly lower discount rates in the process failure than subjects in the outcome failure ($M_{\text{process}} = 34.93$, $M_{\text{outcome}} = 52.50$, $t = -4.47$, $p < .001$). As for the expected apology sincerity, subjects expected significantly more sincere apology in the process failure than subjects in the outcome failure ($M_{\text{process}} = 73.38$, $M_{\text{outcome}} = 66.89$, $t = 2.03$, $p < .05$). The results confirmed the statement hypothesized in H5.

The scale of failure type was re-examined in study 2. The Cronbach's Alpha was .81 for outcome failure, and .87 for the process failure. For the outcome failure scenario, the rating of outcome failure scale was significantly higher than that of process failure ($M_{\text{outcome}} = 7.07$, $M_{\text{process}} = 5.42$, $t = -5.52$, $p < .001$). For the process failure scenario, the rating of outcome failure scale was significantly lower than that of the process failure ($M_{\text{outcome}} = 5.29$, $M_{\text{process}} = 8.00$, $t = -10.72$, $p < .001$). The significant differences on the manipulation outcome and process failures suggest that the scenario construction was successful.

Being consistent with study 1, the overall satisfaction was evaluated by 3 questions in study 2: satisfaction, discount satisfaction and the apology satisfaction. The Cronbach's alpha was .74, indicating good reliability.

5.2.3 Descriptions of Dependent Variables under Manipulation Check

H4 and H5 aim to examine how the resource of time and money and failure type influence the expected discount rate and the apology sincerity, and how such expectation would further lead to different levels of satisfaction and re-patronage intention. For the expectation discrepancy, the difference on the expected discount rate and apology sincerity were described in the previous chapter. Please refer to table 10 for detailed descriptions.

Since mean differences for expected discount rate and expected apology sincerity, are in opposite directions we shall discuss the two expectations separately.

Table 12 Descriptions of Expected Value in Study 2

Expected value	Resource spent		Failure type	
	Time	Money	Process	Outcome
Discount rate	35.97* (25.17)	47.83* (24.69)	34.93** (22.09)	52.50** (25.08)
Apology	75.43** (15.12)	65.20** (21.62)	73.38** (20.44)	66.89** (17.99)

NOTE: Means are shown with standard deviations provided in parentheses.

* Indicates mean difference is significant at .05 level (2-tailed).

** Indicates mean difference is significant at .001 level (2-tailed).

For satisfaction and re-patronage intention, the correlation matrix between satisfaction and re-patronage intention is listed in Table 13. The re-patronage intention is significantly correlated with satisfaction ($r = .60$, $p < .001$), indicating that increasing overall satisfaction would help improve re-patronage intention.

It should be noted that apology satisfaction has a weaker correlation with discount satisfaction and re-patronage intention comparing with those in study one. It is also evident that the Cronbach's alpha of overall satisfaction is a bit lower in study two. Perhaps the lower correlation is due to manipulation differences between study one and study two. In study one, subjects were offered with extremely high/low discount rates (0% or 50% off discount), resulting in the spillover effect on consumers' perceived apology satisfaction. In other words, extremely high/low discount differences lead to the difference in consumers' apology satisfactions ($t_{\text{apology satisfaction}} = 4.44$, $p < .001$). Whereas in study two, the discount rate was set to a lower value of 10%, making subjects to pay more attention to the apologies made by service providers. As suggested by the main effect in Table 15 and Figure 5, the influence of discount rates no longer exists.

The mean comparisons of satisfaction and re-patronage intention across different resource types (time/money) and failure types (process/outcome failure) are presented in Table 14. No significant mean differences were found for overall satisfaction and re-patronage intention, possibly because the directions of mean difference for discount satisfaction and apology satisfaction are opposite. The independent two-sample t-test was conducted to examine these differences. When comparing the mean differences across the type of resource, discount satisfaction of time spending subjects' was significantly higher than that of money-spending subjects' ($t = 2.06, p < .05$); and the apology satisfaction of time spending subjects' was significantly lower than that of money-spending subjects' ($t = -2.02, p < .05$). When comparing the mean difference across failure type, subjects in the process failure condition perceive the discount rate more satisfying than subjects in the outcome failure group ($t = 3.05, p < .01$). They also rate the apology less sincere than those subjects in the outcome failure condition ($t = -3.23, p < .01$).

The directions of discount satisfaction and apology satisfaction contradict what H4 and H5 propose. We will further explore these issues in the following chapter. And because discount satisfaction and apology satisfaction responded in opposite directions, they shall be discussed separately.

Table 13 Correlation Matrix of DVs in Study 2

	1	2	3	4
1. Satisfaction	1			
2. Discount satisfaction	.762**	1		
3. Apology satisfaction	.453**	.229**	1	
4. Re-patronage intentions	.560**	.528**	.364**	1

** Correlation is significant at the 0.01 level (2-tailed).

Table 14 Means Comparison between Resource Spent and Failure Types (Study 2)

	Resource spent		Failure type	
	Time	Money	Process	Outcome
Satisfaction	4.00 (1.23)	3.78 (1.42)	3.93 (1.40)	3.84 (1.28)
Discount satisfaction	4.19* (1.30)	3.70* (1.53)	4.30* (1.40)	3.58* (1.42)
Apology satisfaction	3.70* (1.01)	4.14* (1.51)	3.59* (1.37)	4.27* (1.17)
Overall satisfaction	3.96 (.97)	3.87 (1.22)	3.93 (1.23)	3.90 (1.26)
Re-patronage	3.01 (1.19)	2.80 (1.28)	2.88 (1.16)	2.92 (1.06)

NOTE: Means are shown with standard deviations provided in parentheses.
 * Indicates mean difference is significant at 0.05 level (2-tailed).

5.2.4 Hypotheses Testing

5.2.4.1 The Main Effect of Expectation

In study two, we can see the main effect of expectation discrepancies on consumers' overall satisfaction with compensation strategies, although the compensation strategy was set at a constant value in study two.

The MANOVA procedure is used to examine the main effect of discrepancies between expectation and compensation on satisfaction and re-patronage intention. Because their direction differences discussed in the previous section, discount satisfaction and apology satisfaction will be discussed separately.

The discrepancy between expectation and compensation was derived by deducting the actual compensation from the expected value. The mean differences of discount expectation discrepancy and apology expectation discrepancy are significant under both resource conditions (discount: $M_{\text{time}} = 29.57$, $M_{\text{money}} = 37.83$, $t = -1.99$, $p < .05$; apology: $M_{\text{time}} = 55.43$, $M_{\text{money}} = 45.20$, $t = 3.33$, $p = .001$) and failure types (outcome: $M_{\text{process}} = 24.93$, $M_{\text{outcome}} = 42.50$, $t = -4.47$, $p < .001$; process: $M_{\text{process}} = 53.38$, $M_{\text{outcome}} = 46.89$, $t = 2.03$, $p < .05$).

Again, the discount and apology discrepancies were divided at trisection points, according to their frequency distribution. The “low” category refers to the situation when the actual compensation exceeds customer expectation, the “medium” group refers to the situation when the expectation was in similar level as the compensation, and the “high” group represents the situation when compensation fails to meet expectation. In the literature, the “low” group corresponds to the service failure paradox, whereas the high discrepancy corresponds to the second deviation.

The main effect of expectation discrepancy is exhibited in Table 13. The discount discrepancy has a significant main effect (Pillai's Trace = .60, Wilks' Lambda = .41, Hotelling's Trace = 1.42, Roy's Largest Root = 1.40), so does the apology discrepancy (Pillai's Trace = .51, Wilks' Lambda = .49, Hotelling's Trace = 1.03, Roy's Largest Root = 1.02). It can be observed that discount discrepancy had no influence on apology satisfaction, and apology discrepancy had no significant effect on discount satisfaction.

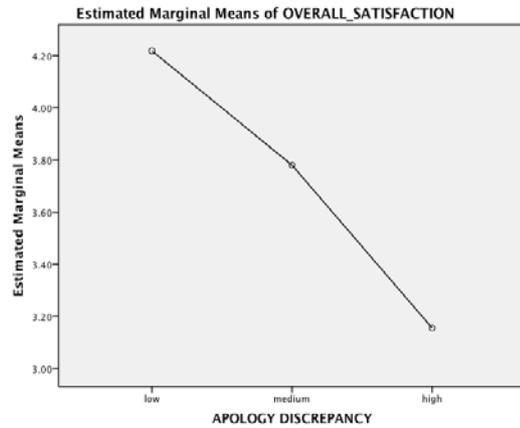
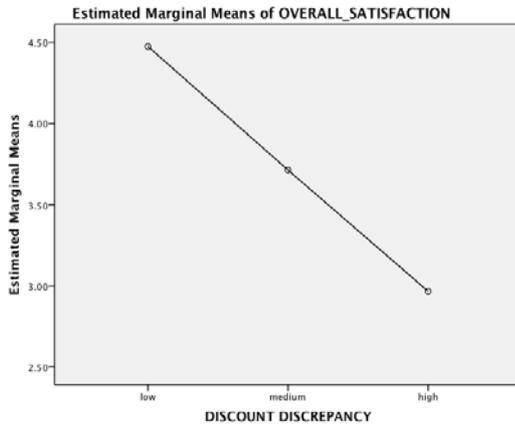
Table 15 MANOVA and the Main Effect of Expectation-Compensation Discrepancy

Independent variables	Main effect	Df1	Df2	F Value	P Value	Partial eta squared	Wilks' lambda
Discount expectation		4	133	14.37	< .001**	.30	.41
Apology expectation		4	133	11.49	< .001**	.26	.49
Effects on separate independent variables							
Discount expectation	Overall satisfaction	2	135	29.68	< .001**	.31	
	Re-patronage	2	135	8.53	< .001**	.11	
	Discount satisfaction	2	135	78.25	< .001**	.54	
	Apology Satisfaction	2	135	1.36	.261	.02	
Apology expectation	Overall satisfaction	2	135	13.98	< .001**	.17	
	Re-patronage	2	135	3.13	< .05*	.04	
	Discount Satisfaction	2	135	.41	.67	.01	
	Apology Satisfaction	2	135	61.22	< .001**	.48	

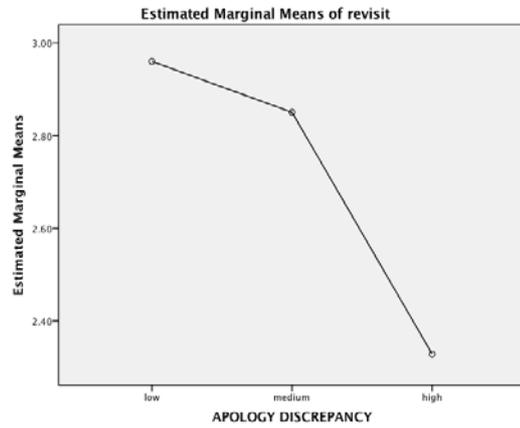
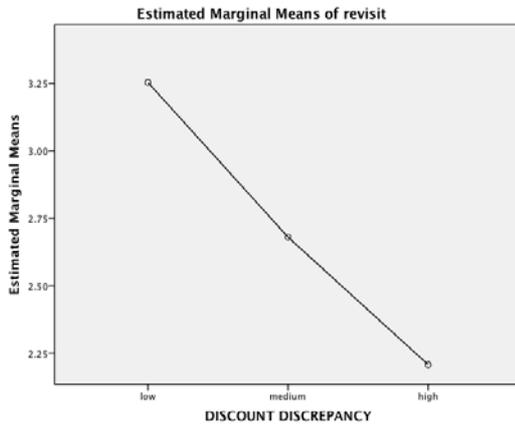
Note: the expectation appeared in this table refers to the gap of expectation and compensation discrepancy

* Indicate significant at .05 ** Indicates significant at .001

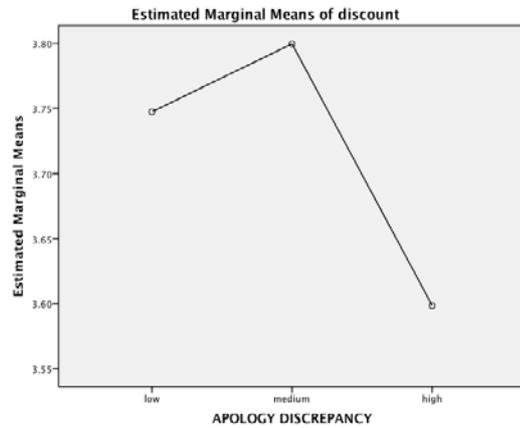
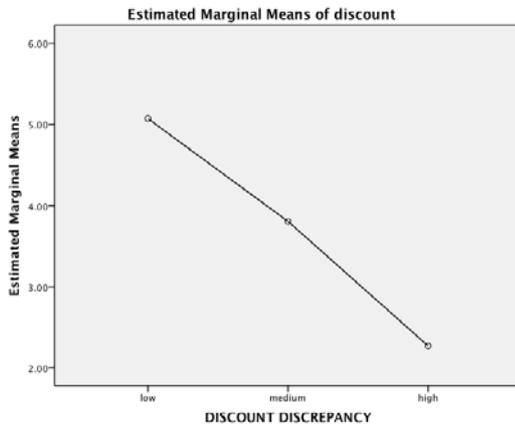
Overall Satisfaction:



Re-patronage Intentions:



Discount Satisfaction:



Apology satisfaction:

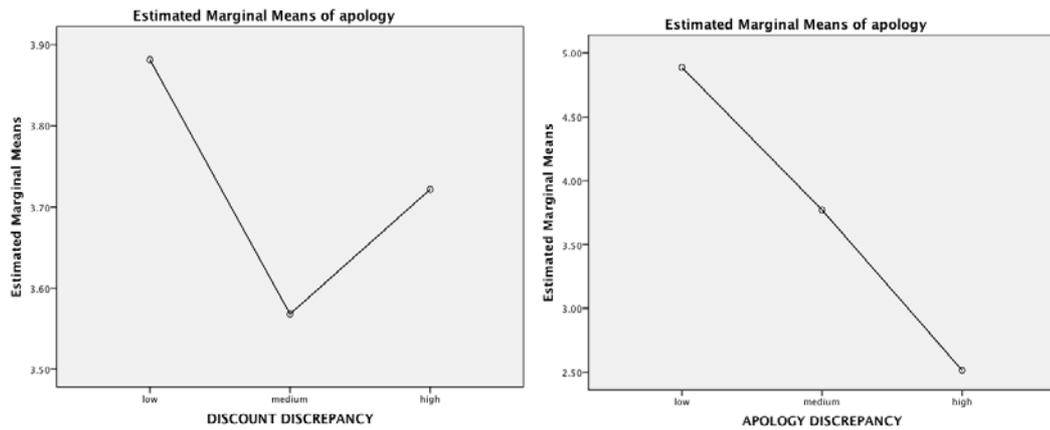


Figure 5 Main Effect of Expectation Discrepancy

5.2.4.2 H4: Resource Spent: Time vs. Money

H4 aims to test whether the framing of resource of time and money influence people’s expectation of discount rate and apology sincerity and how such expectations would affect subjects’ satisfaction and re-patronage intention.

The significant mean differences of expected discount rate and expected apology sincerity were discussed in the previous section. The independent two-sample t-test was conducted. Subjects who spent money expected significantly higher discount rate than subjects who spent time ($M_{\text{money}} = 47.83$, $M_{\text{time}} = 39.57$, $t = -1.99$, $p < .05$). As predicted, they expect significantly lower apology sincerity than subjects who spent time ($M_{\text{money}} = 65.20$, $M_{\text{time}} = 75.43$, $t = 3.32$, $p = .001$). The mean differences are presented in Figure 6.

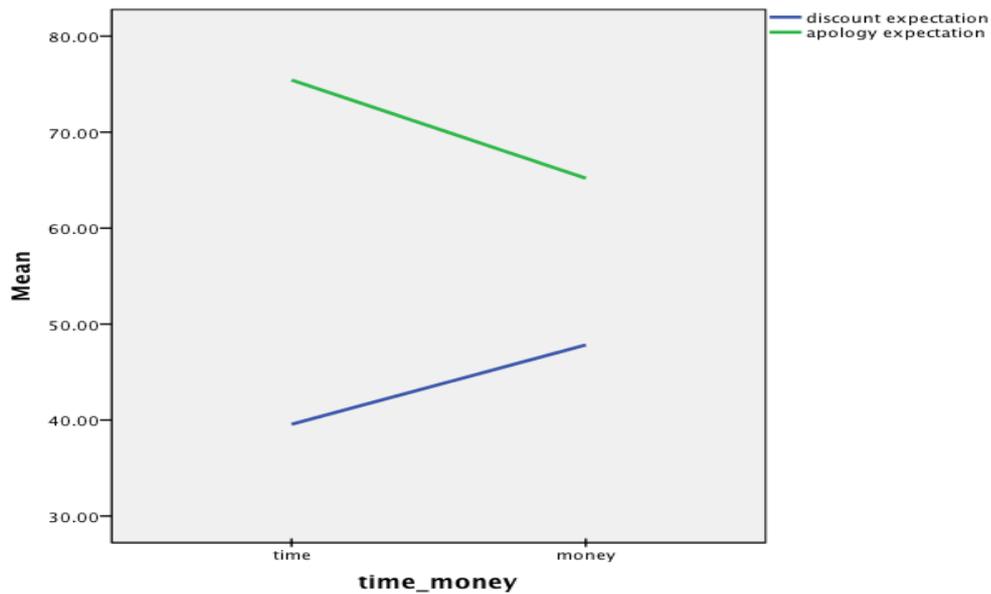


Figure 6 Means Differences of Expectation on Time vs. Money

Through MANOVA, the resource of time and money has no main effect on the overall satisfaction or re-patronage intention ($F(2, 142) = .40, p = .67$). Since time and money framing caused opposite directions in the means differences of apology satisfaction and discount satisfaction, and overall satisfaction is based on these two satisfaction variables, discount satisfaction and apology satisfaction counteract the effect of time and money manipulation.

Contrary to the hypothesis that people who spent time would have higher satisfaction with apology and that people who spent money would have higher satisfaction with discount, the apology satisfaction for the time conditions significantly lower than that of money group ($M_{\text{time}} = 3.71, M_{\text{money}} = 4.14, t = -2.07, p < .05$). Meanwhile, discount satisfaction for money-spending people is significantly lower than that of time-spending people ($M_{\text{time}} = 4.19, M_{\text{money}} = 3.70, t = 2.06, p < .05$). The influence of the resource type of time/money is significant based on the results of MANOVA ($F(2, 139) = 7.79, p = .001$), with $F(1, 140) = 10.07 (P < .05)$ for discount satisfaction and $F(1, 140) = 7.69 (p < .05)$ for apology satisfaction.

Thus, instead of having higher satisfaction with in the corresponding compensation option, subjects are more satisfied with another option, which is

expected to generate less satisfaction. The expectation theory that defines the main effect and differentiates service failure paradox from second deviation can help to explain the counter-intuitive finding. When targeted with a specific compensation strategy, people generally expect a higher level of compensation level than the actual compensation that a service provider wants to make. Therefore, they were fastidious on the recovery strategy for which they have a higher expectation. On the other hand, they have a lower expectation on the other type of compensation (discount for time-spender and apology for money-spender:).

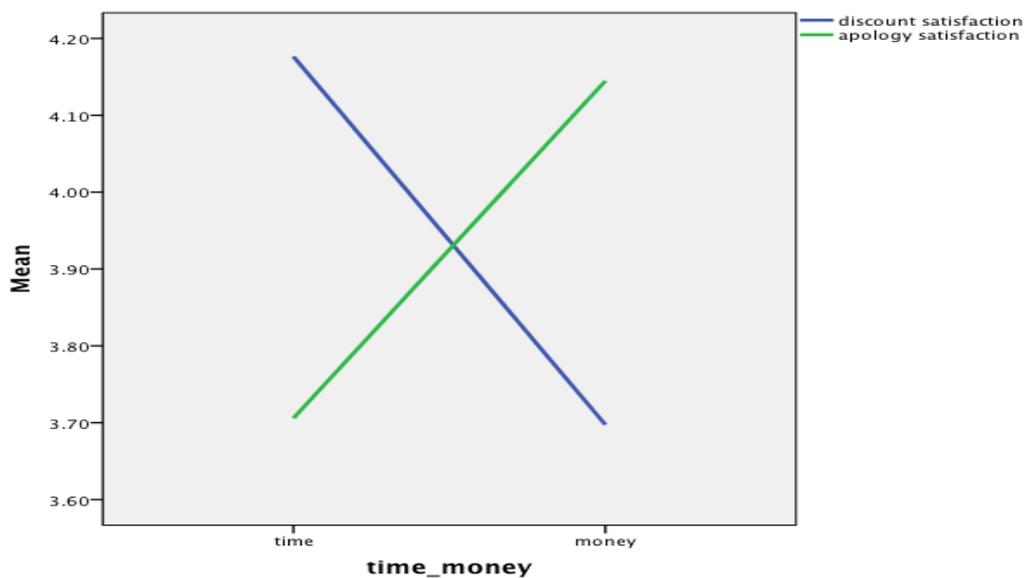


Figure 7 Means Interaction of Satisfaction and Resource Spent

5.2.4.3 H5: Failure Type: Process vs. Outcome

H5 assesses how the failure type would influence expectations of discount rate and apology sincerity, and how such expectations would affect consumer satisfaction and re-patronage intention. It was assumed that people who experience outcome failure would expect higher discount rate and would be more likely to be satisfied with the discount compensation, whereas people suffered from process failure would expect more sincere apology and are more likely to be satisfied with apologies.

As discussed in the previous section, that mean differences of expected discount rate and expected apology sincerity were significant based on the independent two-sample t-test. Subjects who faced outcome failure expected significantly higher discount rate than subjects who faced process failure ($M_{\text{process}} = 34.93$, $M_{\text{outcome}} = 52.50$, $t = -4.47$, $p < .001$). Meanwhile, subjects who suffered from outcome failure expected significantly less sincere apology than subjects who endured process failure ($M_{\text{process}} = 73.38$, $M_{\text{outcome}} = 66.89$, $t = 2.03$, $p < .05$). The detailed interaction is shown in Figure 8. .

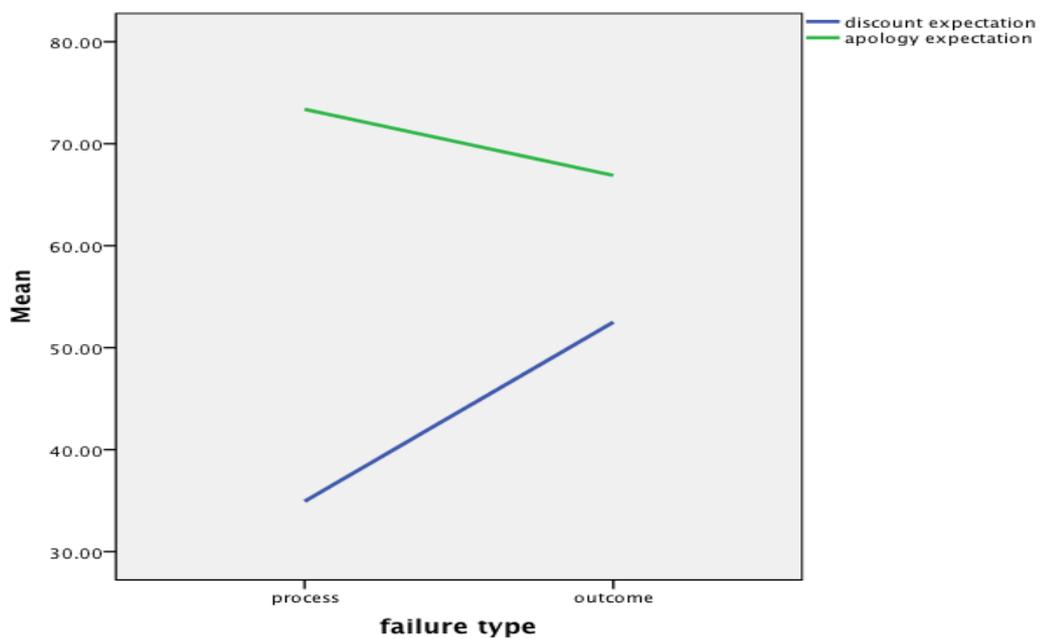


Figure 8 Means Differences of Expectation and Failure Type

The MANOVA results suggest that failure type has no significant main effect on overall satisfaction or re-patronage intention ($F(2, 141) = .16$, $p = .86$). Again the insignificant finding may be due to by the combination of discount satisfaction and apology satisfaction, which are in opposite directions in response to the expectation level and failure type.

The reversed satisfaction levels that contradict the expectations were also found in the failure type manipulation. Subjects who encountered the process failure have significantly higher discount satisfaction than subjects who endured with outcome failure ($M_{\text{Process}} = 4.30$, $M_{\text{outcome}} = 3.58$, $t = 3.05$, $p < .01$). Subjects in the process failure condition have significantly lower apology satisfaction than subjects in the outcome failure condition ($M_{\text{Process}} = 3.59$, $M_{\text{outcome}} = 4.27$, $t = -3.23$, $p < .01$). Through MANOVA, the influence of failure type on both satisfaction variables is significant ($F(2, 141) = 16.27$, $p < .001$), with $F(1, 142) = 10.40$ ($p < .01$) for the discount satisfaction, and $F(1, 142) = 10.97$ ($p = .001$) for the apology satisfaction. The means of the interaction of satisfaction and failure type are exhibited in Figure 9.

The higher-than-expected expectations and the dimension that the subjects focus on may play a vital role in the unexpected findings. Similar to the findings of the resource of time and money, people with high expectation in one situation may be fastidious on the expected compensation, whereas the lower expectation on another compensation may has leads to greater satisfaction.

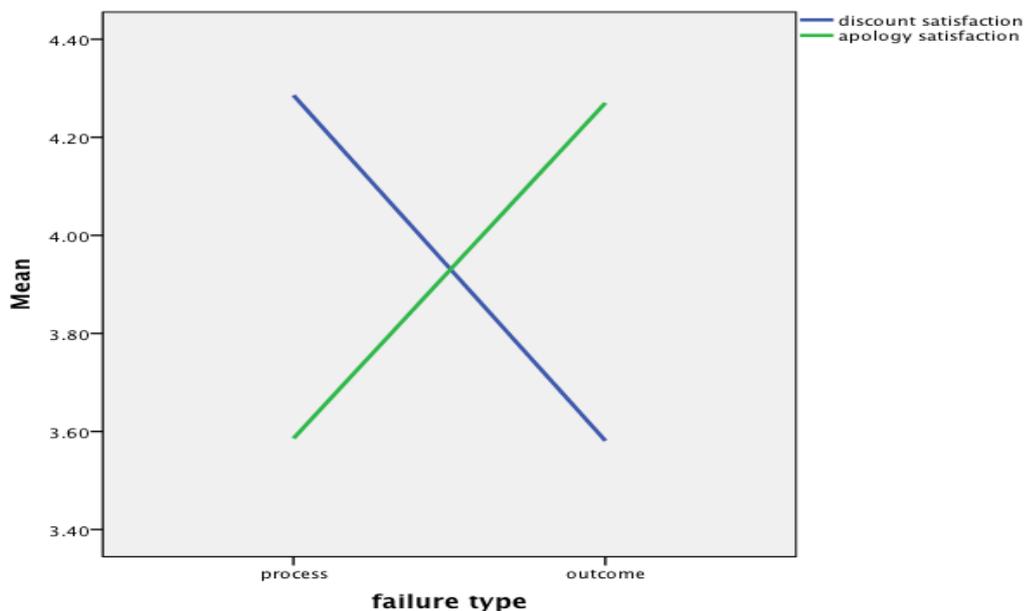


Figure 9 Means Interaction of Satisfaction and Failure Type

Table 16 MANOVA and Main Effect of Resource Spent and Failure Type

Independent variables	Main effect	Df1	Df2	F Value	P Value	Partial eta squared	Wilks' lambda
Time/money		2	141	3.88	.01**	.10	.89
Process/outcome failure		2	141	8.79	< .001**	.20	.79
Effects on separate independent variables							
Time/money	Overall satisfaction	1	142	.28	.60	.002	
	Re-patronage	1	142	.74	.39	.005	
	Discount satisfaction	1	142	5.19	< .05*	.04	
	Apology Satisfaction	1	142	5.03	< .05*	.04	
			142				
Process/outcome failure	Overall satisfaction	1	142	.09	.76	.001	
	Re-patronage	1	142	.07	.79	.00	
	Discount Satisfaction	1	142	10.40	< .01**	.07	
	Apology Satisfaction	1	142	10.97	.001***	.07	

* Indicate significant at .05 level

**Indicate significant at .01 level

***Indicate significant at .001 level

CHAPTER 6 DISCUSSION

6.1 Result Discussions and Conclusion

6.1.1 The Role of Expectation Discrepancy

Through these studies, we attempt to address the key question: why some consumers are still dissatisfied although compensation has been made? Apparently, the answer lies in the key concept of expectation, which plays a central role in affecting consumers' responses to recovery strategies after service failures. The mechanism through which expectation disconfirmation affects customer satisfaction and re-patronage intention was verified in two studies. The positive expectation disconfirmation can lead to over-satisfaction, whereas the negative expectation disconfirmation can lead to the second deviation, i.e., further disappointment and dissatisfaction. Therefore, to enact effective recovery strategies we first need to know what consumers really expect.

In study one, the results suggest that the expectation plays the mediating role on how subjects perceive the recovery strategies, including discounts and apologies. It is reasonable that consumers report greater satisfaction with high discount rates and sincere apology. However, the level of satisfaction, or "how satisfied", was mediated by the discrepancies between their expectations and actual compensations. That is why certain consumers are still dissatisfied although compensations were offered. Study one further reveals that when the discrepancies between expectations and compensations were low, customer satisfaction was the highest among all the situations. In cases of high discrepancies between expectations and compensations, customer satisfaction was the lowest. Thus, when recovery efforts exceed customer

expectations, they will be over-satisfied, even more satisfied than the average level (when compensation more or less meet the expectation). On the other hand, when recovery efforts fail to meet customer expectation, consumers will be the least satisfied. These results confirmed the association between satisfaction and expectation (Tax, Stephen S & Stephen, 1998) and as the mechanism of expectation espoused in the disconfirmation theory (Bolton & Drew, 1991; Oliver, 1980; Oliver & Swan, 1989).

It should be noted that consumers often have ambivalent feelings about the service failures and recovery efforts of marketers. On one hand, they may feel “the more, the better”, in that they may have higher than average expectations. In some extreme cases, service providers should give 100% compensation or full refund even if the mistake was only minor one, e.g., “2” on the severity scale of 7. On the other hand, consumers may think that service providers cannot solve this problem completely to their satisfaction ($M_{\text{general expectation}} = 3.95/3.67$ in study 1/2). In light of such contradictory feelings, it is plausible that customer satisfaction with recovery strategies would vary significantly depending on their expectation (Churchill & Surprenant, 1982; P. G. Patterson, 1993). Both studies suggest that consumers are satisfied even though their expectation is slightly higher than the actual compensation. As confirmed in both studies, the relationship between expectation and satisfaction is apparently elastic, and consumers may adjust their evaluation accordingly (Hsee, 1995, 1996; Tsai & Hsee, 2009). Consumer satisfaction with recovery strategies, especially with apology, may vary, depending on the framing of time or money as the invested resource. Consumers may be tolerant of a minor discrepancy between expectation and compensation.

It should be noted that in Figure 4, that the mediating effect of expectation discrepancies had no effect on the low discount compensation, possibly because such compensation has not reached the threshold to influence consumer satisfaction, regardless of their expectations. It is also possible that consumers may have “higher-than-average” expectations, making them fastidious to compensation with a low discount rate.

Judging from figure 4, the main effect (ANOVA) of expectation discrepancy on re-patronage intentions varies depending on the recovery strategy. With respect to

the discount strategy, it leads to stronger re-patronage intentions only when the discount rate exceeds consumer expectation. As far as apology is concerned, re-patronage intention remains high unless it is not sincere enough to meet consumer expectation. These divergent findings may be due to the nature of these two resources. Discount rate is straightforward and less elastic, so consumers have a clear clue about its worth. Therefore, it is easier for consumers to determine whether it meets their expectation and whether they are satisfied enough to re-patronize the same service provider. On the other hand, assessment of an apology is often based on emotional cues and may be more elastic. Consumers can only be sure to accept an apology when they feel that the apology is sincere enough, i.e., meeting or exceeding their expectation.

Moreover, fully mediated by the overall satisfaction, re-patronage intentions responded to recovery strategy differently. Re-patronage intention is based on the evaluation of both failures and the compensation. Even if the compensation is satisfactory, consumers may not come back, for fear of the re-occurrence of the same accident (Matos et al., 2007; Maxham III James G, 2001).

Study two reveals that consumer expectation affects their satisfaction with recovery strategies in an unexpected way. To satisfy consumers means not only to meet the expectation by compensating them in the same kind of invested resource, but also to surprise them by compensating them in other resource category. Although the mental account theory and resource exchange theory suggest that people prefer the same kind of resources exchanged (Foa et al., 1992; R. H. Thaler, 1999, 2008), , they may not be necessarily be satisfied with only compensation of the same type of resource. For consumers who “lost” time, they already expect an apology, thus would pay more attention to the compensation effort in the other category of resource, i.e., discount, because when a discount is offered, although of another resource category, it is more likely to surprise the consumers in a pleasant, because it exceeds their expectation. The reverse is also true for consumers who lost “money” and expect some compensation in terms of a discount, offering an sincerely apology, although somewhat unexpected, would be more effective as a recovery strategy, because it is an unexpected and pleasant surprise. The same principle of satisfying consumers using a pleasant surprise also applies to the failure type, whether it is an

outcome failure or a process failure. Thus, whether the service provider frame the loss as one of time or money makes a difference in how consumers view respond to the recover strategies. Such framing effect has meaningful implications for service providers when they attempt to recover service failures and to retain consumers after such failures.

Although consumers may favor discount as a method of compensation in suggested by study one, study two reveals that by framing the failure as a loss of one type of resource, service providers may be able to surprise and satisfy consumers via compensation via the other type of resource. In a way, the findings of these two studies confirms and more importantly extends the propositions of the mental account theory (R. Thaler, 1980; R. H. Thaler, 1999, 2008) and the resource exchange theory (Brinberg & Wood, 1983; Chan & Wan, 2008; Foa et al., 1992).

Furthermore, the findings helped to highlight the special nature of time. As a kind of nonsocial resource (Chan et al., 2009), time is associated with emotions when making choices (Lee et al., 2009, 2011), especially in experience-related consumptions (Leclerc et al., 1995). In both studies using the restaurant context, consumers indeed expected more apology as a kind of emotional compensation, especially when they were framed with time-loss.

Lastly, both studies confirmed that expectation influence consumer satisfaction consumers with recovery strategies. Given the mediating effect of expectation discrepancies, it is easier to compensate consumes who “lost” time with the discount strategy, while sincere apologies go a long way to please consumers whose loss is framed monetary.

6.2 Managerial Implications

In this paper, we clarified the importance of expectation in recovery post to service failures. Although introduced as an important variable previously (Maxham III James G, 2001; Oliver, 1980; Oliver & Burke, 1999; Oliver & Swan, 1989; P. G.

Patterson, 1993), the role of expectation was not clearly defined, especially as the watershed for service failure paradox and second deviation. These two studies suggest that expectation influence consumers' perceptions of discount rates as well as the apologies, and help to answer the question raised in the beginning: why certain consumers are still dissatisfied though the compensation was made? Because expectations differ among consumers, service providers need to take such knowledge into consideration when devising their recover strategies.

Clearly, both the type of source and the type of failure can influence consumer expectations as well as their satisfaction with recovery strategies and re-patronage intention. The results provide viable and more effective options for managers to formulate more recovery strategies: compensate according to the nature of lost resource and the type failure, and more importantly to surprise consumers by compensating them in unexpected ways. Not only to give consumers what they desire, but to compensate them in unexpected and pleasant ways are apparently more effective for retain consumers after service failures.

The results of the two studies give us a refreshed understanding of service failure paradox and second deviation. These insights can help the managers to find solutions to rectify an already bad situation and to avoid a worsening scenario. The role of expectation and its discrepancies, in both a positive and negative way help to explain why consumers have different perceptions of the same compensation strategy. Moreover, we articulate the factors that can alter consumers' expectations, given the type of resource and failure, and affect their satisfaction with recovery strategies.

These studies suggest that the type of resource lost during service failure --- time and money---influence people's expectation, which in turn affect their satisfaction and re-patronage intention. As a topic that has been studied extensively in the research of consumer decision-making, the value of time and money received little attention in service failure. Every consumer spent both time and money while consuming services. Comparing to the value of money, which is often used to evaluate the recovery of service failure, the value of time consumers has been largely ignored. For some consumers, they are unhappy with recovery strategies, because these efforts fail to meet their expectations. In the focus group discussion, some

subjects mentioned that, “the monetary compensation does not hide the fact that they wasted my time, and I will not be satisfied because my time is extremely valuable”.

As the results suggest, however, consumers who lost time are more satisfied with discount, while those who lost money are happier with the apology. From the managers’ perspective, it does not mean that we should not make every effort to meet customer expectations. The failure to meet consumer expectation would lead to greater dissatisfaction, as suggested in both studies. The lesson for managers is to meet and exceed customer expectations and more importantly to satisfy customers in an unexpected way.

According to study one, the dominant effect of discount should be noted. Subjects’ overall satisfaction and their re-patronage intention are responsive to a big discount, despite the fact that some of them may expect an apology. As a common basis of people’s judgment, monetary values are more direct and accessible to them. For managers, it might be good news---to give discount will always be a good way to solve problems---and confirms that discount is “the most important recovery dimension” (Tax et al., 1998). However, an apology is always expected and can be ignored. Study one shows that a weak apology leads to lower satisfaction and re-patronage intention. For consumers who are expecting a discount, a sincere apology provides extra assurance that consumers will be satisfied with the recovery effort.

6.3 Limitations and Directions for Future Research

Among the research limitations, the external validity is apparently a major issue. Results of this study are limited to the sample, which consists of university students. Although students have ample consumption experiences, they cannot represent the general consumers. In addition, the studies were based on imaginary scenarios and subjective ratings of recovery strategies. One may have concerns with how service failures and consumer reactions will turn out in real life situations. In the future, a field study shall be considered to include general consumers and to examine

the effect of recovery strategies and the moderating factors in real consumption circumstances.

The manipulations of time and money in both studies are two special cases, aiming to frame consumers' attentions to one specific kind of resource. Although such manipulations are less likely to happen in real life, the aim was to see how they affect consumer expectations when they are reminded of one type of resources. In a real consumption environment, consumers may weigh the value of these resources through other ways. For instance consumers may weigh loss of time as more serious when they are deficient in such resource, e.g. office workers who are on a short lunch break.

In future research, the functions of resource time and money in service failure can be further explored. The context under which people evaluate the resources and construct their expectations should be investigated. Although researchers have found that people usually weight the money loss more severe (Okada & Hoch, 2004), others suggest that the loss of time hurts more (Leclerc et al., 1995). Moreover, people evaluation of time is more elastic, and people expected to be compensated more when such loss does not have specific values (Hsee, 1995, 1996; Tsai & Hsee, 2009). Under what circumstances will people weigh time more present a fruitful avenue for future research.

In these two studies, expectation is measured through the subjective ratings, so are satisfaction and re-patronage intentions. Future studies can convert expectations into choices and decisions. As for compensation strategies, managers may have more than one option. How consumers choose their preferred compensation would help better understand their expectation and preferences, and to provide actionable strategies for managers. In certain service failure situations, managers may not be able to carry out immediate compensation. Researchers may also look into how the type of resource and the type of failure may influence consumers' preferences for immediate compensation or waiting for a better one.

Although recovery strategy has direct impact on satisfaction and re-patronage intention, other emotional factors, shall be considered to have mediating effect on the satisfaction, for example, the level of perceived severity or anger towards the service

provider. Previous studies found that anger and justice would influence consumer satisfaction in cases of second deviation (Casado-Díaz, Más-Ruiz, & Kasper, 2007; Smith et al., 1999), and trust and emotions plays a major in in loyalty behavior and re-patronage intention (DeWitt, Nguyen, & Marshall, 2008). In our studies, the concept of time, apology, and process failure are all associated with customers' emotions. Thus, understanding how emotions interact with consumers' behavioral intentions in the consumption process would be crucial. Because those factors are by-products of service failures, they should somehow connect with perceptions of service failure and evaluation of recovery strategies.

The type of process and outcome failure needs further discussion in the future research. The categorization of service failures has evolved into a new manner: social failure and nonsocial failure (Chan et al., 2009). Social failure specifies the loss of social resource, due to the "interaction with the service staff" (e.g. a restaurant waiter was rude when serving the dish); whereas nonsocial failure refers to the loss of nonsocial resource, due to the "service environment or service outcome" (e.g. a restaurant fails to serve the dish ordered). Outcome vs. process failure have helped to define the effect of justice perceptions (Smith et al., 1999) and attribution factors (Hart et al., 1990). Social vs. nonsocial failure stresses the way in which a failure has occurred, and gives a clear division regarding to the type of resources wasted. More importantly, it provides a better way to define the loss of time. While the nature of time is unique and has emotional clues attached to it (Lee et al., 2009, 2011), it may also be regarded as nonsocial failure (Chan et al., 2009). Therefore, the perception of time and definition of service failures can be a controversial but an important issue for future research.

APPENDIX A: PRE-TEST QUESTIONNAIRE OF STUDY 1

Please imagine a scenario as follows:

You did a part-time research assistant job for the marketing department: a 4-hour data-entry work. As a reward, you are offered a dinner for two at fancy restaurant.

(The money-spent condition: you decided to spent HK\$200 to have a dinner for two at a fancy restaurant)

You and another person go to the restaurant for dinner to celebrate a special occasion.

You are seated at your table. The waiter comes to take your order. You place your order. The waiter informs you that the restaurant is out of the entrée you selected.

You make another selection. Ten minutes later, the waiter comes to inform you that the restaurant is also out of your second choice of entrée. At last, you were forced to choose one that you do not want very much.

1. How severe do you think the accident is?

1 2 3 4 5 6 7

Not severe at all

Extremely Severe

2. How angry do you feel about this restaurant?

1 2 3 4 5 6 7

Not angry at all

Extremely Angry

3. To what extent do you feel that your dignity is injured?

1 2 3 4 5 6 7

Not at all

Totally

4. In general, to what extent do you expect the restaurant to solve this problem to your satisfaction?

1 2 3 4 5 6 7

Not satisfied at all

Extremely Satisfied

5. How much do you expect the restaurant to compensate you? _____% off discount. (Please fill in a number between 0-100)

6. How sincere do you expect the restaurant's apology?

If 100 represent the most sincere apology that the restaurant can make, and 0 represents the least sincere apology that the restaurant can make, please write down a number between 0-100 to state your expectation of the sincerity level of the apology made by the restaurant _____

After your expression of the dissatisfaction, the restaurant managers approached you, expressed the inconvenient situation. And gave you a 50% off discount of the total bill *(Another condition: no discount was offered)*. 3 days later, a personal letter with your name labeled mailed to your private address. It clearly defined the

problem with full responsibility undertaken by the restaurant (*Another condition: the waiter just said "sorry"*).

7. In general, how satisfied are you with the restaurant?

1 2 3 4 5 6 7
Not satisfied at all Extremely Satisfied

8. How satisfied are you with the bill discount made by the restaurant?

1 2 3 4 5 6 7
Not satisfied at all Extremely Satisfied

9. How sincere will you rate the restaurant's apology?

1 2 3 4 5 6 7
Not sincere at all Extremely Sincere

10. Does the compensation effort done by the restaurant fit your expectation?

1 2 3 4 5 6 7
Much worse than expected As expected Much better than expected

11. How much do you feel respected by the restaurant?

1 2 3 4 5 6 7
Not respected at all Totally respected

12. What is the likelihood for you to revisit the restaurant?

1 2 3 4 5 6 7
Extremely unlikely Extremely likely

13. What is the likelihood for you to share this experience with your friends or relatives?

1 2 3 4 5 6 7
Extremely unlikely Extremely likely

14. What is the likelihood for you to post this experience to the public or strange others (e.g. through Facebook, Twitter, or Openrice)?

1 2 3 4 5 6 7
Extremely unlikely Extremely likely

15. How valuable do you think 4 hours is?

1 2 3 4 5 6 7
Not valuable at all Extremely valuable
(*Money spent conditions: How valuable do you think HK\$ 320 is?*)

16. How much do you think your 4-hour worth? HK\$_____

(*Money-spent condition: In terms of hours, how many hours do you think HK\$ 200 worth?*)

Your age: _____

Sex: Male/ Female

Major: _____

Year of school: 1st /2nd/3rd/4th

Your nationality: _____

Please indicate your monthly family income:

A. Below HK\$ 10,000 B HK\$ 10,000 --- 30,000 C HK\$30,000 --- 100,000

D Above HK\$ 100,000

APPENDIX B QUESRONNAIRE OF STUDY 1

Please image a scenario as follows:

You did a part-time research assistant job for the marketing department: a 4-hour data-entry work. As a reward, you are offered a dinner for two at fancy restaurant.

(The money-spent condition: you decided to spent HK\$320 to have a dinner for two at a fancy restaurant)

You and another person go to the restaurant for dinner to celebrate a special occasion.

You are seated at your table. The waiter comes to take your order. You place your order. The waiter informs you that the restaurant is out of the entrée you selected.

You make another selection. Ten minutes later, the waiter comes to inform you that the restaurant is also out of your second choice of entrée. At last, you were forced to choose one that you do not want very much.

1. How severe do you think the accident is?

1	2	3	4	5	6	7
Not severe at all						Extremely Severe

2. How angry do you feel about this restaurant?

1	2	3	4	5	6	7
Not angry at all						Extremely Angry

3. To what extent do you feel that your dignity is injured?

1	2	3	4	5	6	7
Not at all						Totally

4. In general, to what extent do you expect the restaurant to solve this problem to your satisfaction?

1	2	3	4	5	6	7
Not satisfied at all						Extremely Satisfied

5. How much do you expect the restaurant to compensate you? _____% OFF discount. (Please fill in a number between 0-100)

6. How sincere do you expect the restaurant's apology?

If 100 represent the most sincere apology that the restaurant can make, and 0 represents the least sincere apology that the restaurant can make, please write down a number between 0-100 to state your expectation of the sincerity level of the apology made by the restaurant _____

After your expression of the dissatisfaction, the restaurant managers approached you, expressed the inconvenient situation. And gave you a 50% off discount of the total bill *(Another condition: no discount was offered)*. 3 days later, a personal letter with your name labeled mailed to your private address. It clearly defined the

Your age: _____

Sex: Male/ Female

Major: _____

Year of school: 1st /2nd/3rd/4th

Your nationality: _____

Please indicate your monthly family income:

A. Below HK\$ 10,000 B HK\$ 10,000 --- 30,000 C HK\$30,000 --- 100,000

D Above HK\$ 100,000

APPENDIX C QUESTIONNAIRE OF PRE-TEST 2 & STUDY 2

(Note: because no modification was made in study 2, the pre-test and study 2 adopted the same version of questionnaire)

Please imagine a scenario as follows:

You did a part-time research assistant job for the marketing department: a 4-hour data-entry work. As a reward, you were offered a dinner for two at a fancy restaurant.

(The money-spent condition: you decided to spend HK\$320 to have a dinner for two at a fancy restaurant)

You and another person go to the restaurant to celebrate a special occasion.

After seated, you asked to take the order, but the waiter made you wait for 10 minutes before taking your order. The waiter did not refill your water while you were eating, and forgot to bring you drinks ordered. And he finally offered you the drink after you urged for 3 times.

(In nonsocial failure condition: After you placed order, the waiter informed you that the restaurant was out of the entrée you selected. You made another selection. 10 minutes later, the waiter came to inform you that the restaurant was also out of your 2nd choice of entrée. At last, you were forced to choose one that you did not want at all.)

Please think through the 4 hours you have invested to get this dinner, and answer the following questions:

1. How bad do you think the service is?

1	2	3	4	5	6	7
Not bad at all						Extremely bad

2. How angry do you feel?

1	2	3	4	5	6	7
Not angry at all						Extremely angry

3. In general, to what extent do you expect the restaurant to solve this problem to your satisfaction?

1	2	3	4	5	6	7
Not satisfied at all						Extremely satisfied

4. How much do you want to pay? _____% of the total bill.

(Please fill in a number between 0-100)

5. How sincere do you expect the restaurant's apology to be?

If 100 = the most sincere apology that the restaurant can make,

0 = the least sincere apology that the restaurant can make,

Please write down a number between 0-100 to indicate your expectation about the apology made by the restaurant_____

6. The restaurant delivered professional quality on serving right food.

1 2 3 4 5 6 7 8 9 10

Extremely disagree

Extremely agree

7. The waiter did not show you respect.

1 2 3 4 5 6 7 8 9 10

Extremely disagree

Extremely agree

8. The waiter's attitude was acceptable.

1 2 3 4 5 6 7 8 9 10

Extremely disagree

Extremely agree

9. The restaurant's food-serving quality was not so good.

1 2 3 4 5 6 7 8 9 10

Extremely disagree

Extremely agree

After expressed your dissatisfaction, the restaurant manager approached you, expressed the inconvenient situation. On behalf of the waiter, the restaurant manager apologized to you with several "sorry". And he gave you a 10% off discount of the total bill.

10. In general, how satisfied are you with the restaurants' compensation?

1 2 3 4 5 6 7

Not satisfied at all

Extremely satisfied

11. How satisfied are you with the *bill discount* made by the restaurant?

1 2 3 4 5 6 7

Not satisfied at all

Extremely satisfied

12. How sincere will you rate the restaurant's *apology*?

1 2 3 4 5 6 7

Not sincere at all

Extremely sincere

13. Does the compensation done by the restaurant fit your expectation?

1 2 3 4 5 6 7

Much worse than expected

As expected

Much better than expected

14. How much do you feel respected by the restaurant?

1 2 3 4 5 6 7

Not respected at all

Totally respected

15. What is the likelihood for you to revisit the restaurant?

1 2 3 4 5 6 7

Extremely unlikely

Extremely likely

16. What is the likelihood for you to recommend this restaurant to others?

1 2 3 4 5 6 7

Extremely unlikely

Extremely likely

17. How valuable do you think 4-hours is?

1 2 3 4 5 6 7

Not valuable at all

Extremely valuable

(Money spent conditions: How valuable do you think HK\$ 320 is?)

Your age: _____

Sex: Male/ Female

Major: _____

Your nationality: _____

Please indicate your monthly family income:

A. Below HK\$ 10,000 B HK\$ 10,000 --- 30,000 C HK\$30,000 --- 100,000

D Above HK\$ 100,000

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