

# Relationship between Consumers' Perceptions, Website Characteristics and Repurchase Intention-the Mediating role of Recovery Satisfaction

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**Abstract**—The article proposes a model that related material factors, affective factors, handling process factors to consumers' repurchase intention, mediated by recovery satisfaction. Data was collected from students studying at a number of colleges and workers. A total of 400 questionnaires were distributed, of which 256 were successfully replied respondents, yielding a usable response rate of 64%. Multiple regression analyses were used for hypothesis testing. The results of the study show that complain frequency, perceived norms, perceived monitoring, perceived apology and ease of use of grievance channels have a significant impact on consumer's repurchase intention. In addition, the mediating impact of recovery satisfaction is partially supported. Suggestions for implications of the research and future research are also presented.

**Keywords**—Material factors, affective factors, handling process factors, recovery satisfaction, consumers' repurchase intention

## I. Introduction

The growth of Internet in recent years has brought about greater diversity online shopping. Online shopping feature low overhead and convenient and rapid operations which has led to traditional retail businesses following suit seeking a share of the pie. The Internet market has a promising future. With traditional retail businesses, consumers experience or select products in person before they purchase it. Online shopping, on the other hand, only provide consumers with products or services after consumers have purchased them. As such, issues associated with these two retail patterns might be insufficient to describe the current status of internet commerce. It is hence worth further exploration.

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The difference between online shopping and traditional retailers is that consumers can only identify products through written descriptions and photos posted on the website, and hence complaints are likely when the seller's impressions of a product differ from the consumer's expectations. Adequate service to amend and address the said issue, however, helps retain customers and build a good reputation.

Gountas and Gountas [1] explored services provided in the airline industry and found that service providers affect consumer satisfaction in two aspects, involving material factors and affective factors. These two aspects can affect consumer satisfaction to various extents during the complaint management process. Siomkos and Vrechopoulos [2] indicated that the interface of a shopping website is one of the factors influencing customer satisfaction. This paper explores important factors affecting customer complaint management satisfaction in three aspects by combining the publications described above. The three aspects are material factors (perceived norms, perceived monitoring), affective factors (perceived apology), and handling process factors (accessibility of complaint channels). They are analyzed with regard to whether they affect post-recovery satisfaction and then the willingness to purchase again. Academic suggestions are provided on the basis of research results for the client's reference when establishing customer service strategies.

## II. Literature

### A. *Material Factors: Perceived Norms, Perceived Monitoring*

Gountas and Guntas [1] believes that if consumers emphasize material remedies, it means that consumers are concerned about tangible services. Consumers anticipate substantive compensation during the recovery process. As such, if the company can provide material compensation that meets customer expectations, it is easier to generate satisfaction among its consumers. Perceived norms and perceived monitoring are examples of material compensation. Perceived norms refers to guidelines being established to prevent opportunistic, and facilitate collaboration and proactive resolutions for related problems [3]. Schaefer [4] believes that norms, once established, will help sellers build trust in their values, attitudes, and interest-sharing features. Online retailers abiding by or establishing their own norms will be perceived positively among consumers. If the norms

established by a company deemed trustworthy by consumers, the consumers will perceive that the company handles complaints in accordance with the norms and hence will be willing to buy again from the same seller despite previous errors. Thus, we proposed the following hypothesis:

**H1-1:** Perceived norms are positively associated with consumers' repurchase intention.

Perceived monitoring means that there is a specific mechanism in the market to ensure orderly market operations. Pavlou [5] believes that monitoring is to ensure that all transactions are done in accordance with a set of widely accepted agreements and rules. Third-party monitoring is believed to be important [6]. While complaints are being handled, if consumers perceive that there are existing systems and guidelines in the market that can help maintain market order, they will be confident that their complaints will be adequately addressed and hence their complaint management satisfaction will increase. In other words, in a market with monitoring activities, complaint management satisfaction will increase and it helps enhance the chance for consumers to buy again from the same seller despite previous errors. Thus, we proposed the following hypothesis:

**H1-2:** Perceived monitoring is positively associated with consumers' repurchase intention.

### B. Affective Factors: Perceived Apology

An apology is pacifying both spiritually and emotionally. Apologies also been found to be an important factor affective consumer behavior [7]. When consumers file a complaint, they will vent the resentment during the process in order to receive friendly responses. If online retailers can apologize immediately, it helps soothe the consumers' emotions. Davidow [8] indicates that an apology can be seen as psychological compensation for consumers. Through an apology, consumers reach a psychological balance. Once a balance is reached during the complaint filing process, consumers tend to view the company differently and be satisfied with the outcome. Thus, we proposed the following hypothesis:

**H1-3:** Perceived apology is positively associated with consumers' repurchase intention.

### C. Handling Process Factors: Perceived Apology

During the handling process, consumers first have to deal with the webpage and interface, through which they can file their complaints. Generally speaking, a good website interface for an online shop helps increase consumers' willingness to buy [9]. Other display features such as guided tours and convenience enable consumers to have optimal shopping experiences and increase perceive usefulness [10]. When we apply the said research conclusions in the management of consumer complaints, we can infer that an adequately designed website display will reduce the time and effort required for consumers to file complaints, and enable consumers to indicate problems with products or services and

vent their emotions through adequate channels. They would then accordingly forgive the company at fault and increase their willingness to shop there again. Thus, we proposed the following hypothesis:

**H1-4:** Accessibility of complaint channels is positively associated with consumers' repurchase intention.

### D. Recovery Satisfaction

When consumers purchase products sold by online retailers but find that the products or services do not meet their expectations after the purchase, they tend to file complaints. Despite the fact that online retailers are unable to eliminate consumer complaints, they can take effective measures as a remedy [11]. As part of the remedy effort, the affected seller will stipulate the criteria and methods for addressing complaints, to try to correct the failed product or service relationship [12]. A key to successful recovery is to satisfy consumers' demand and maintain the seller-buyer relationship [13]. When consumers continue to feel dissatisfied with the recovery effort from a specific online retailer after they have filed complaints, it tends to put an end to future seller-buyer relationships as the consumers will buy from other retailers instead [14]. A summary of arguments in related publications shows that post-recovery satisfaction is the foundation for consumers to be willing to buy from the seller at fault again. As long as consumers are satisfied, chances are that an end to the seller-buyer relationship can be avoided and the consumers may even be likely to buy from the same seller again in the future. Thus, we proposed the following hypothesis:

**H2-1:** Recovery satisfaction plays mediating role in the relationship of perceived norms and consumers' repurchase intention.

**H2-2:** Recovery satisfaction plays mediating role in the relationship of perceived monitoring and consumers' repurchase intention.

**H2-3:** Recovery satisfaction plays mediating role in the relationship of perceived apology and consumers' repurchase intention.

**H2-4:** Recovery satisfaction plays mediating role in the relationship of accessibility of complaint channels and consumers' repurchase intention.

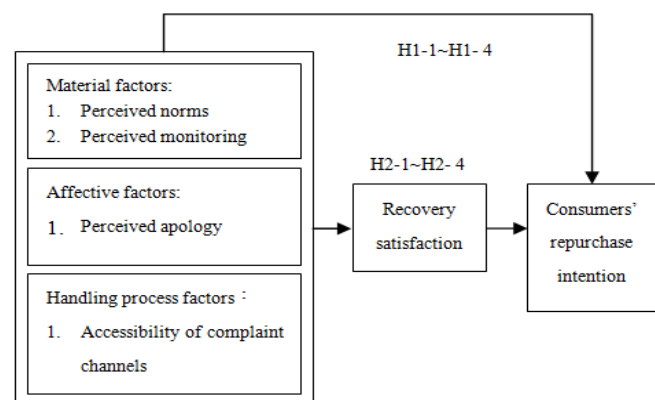


Figure 1. Research Framework

The conceptual framework that guided our research is presented in fig. 1.

### III. Methodology

#### A. Sample

Respondents to the questionnaires were restricted to consumers who had complaint experience in the most recent six-month. Convenient sampling was undertaken as a fast and easy way to collect data. A two-wave emailing method, supplemented by an email reminder, was adopted in data collection. A total of 400 survey questionnaires were sent out, of which 256 were completed and returned, representing a 64% return rate.

#### B. Questionnaire Development and Measures

The authors employed questionnaires developed by previous studies with proper modifications to suit the environment of Taiwan's online shopping and their research objectives. All multi-item variables in this study were measured using a five-point Likert scale. We modified the Pavlou's [5] scales to address perceived norms and perceived monitoring. Perceived apology is measured by Davidow's [8] scales. We modified Jeong's [15] scales to address perceived accessibility of complaint channels. Besides, we used and modified questionnaire which was developed by Goodwin and Ross's [16] scales to address perceived recovery satisfaction. Consumers' repurchase intention is measured by Smith and Bolton's [17] scales.

TABLE I. CHARACTERISTICS OF THE SAMPLE (N=256)

Demo graphic items	Valid percentage	Demo graphic items	Valid percentage
Gender		Age	
Male	48.0%	Under 25	48.8%
Female	52.0%	26~35	31.6%
	100.0%	36~45	17.2%
		46~55	1.6%
		Over56	0.8%
			100.0%
Education		Purchase amount (\$NT.)	
Senior high school	10.1%	Under 2000	75.0%
University	67.2%	2001~4000	19.1%
Master	21.9%	4001~6000	3.9%
Others	0.8%	6001~8000	0.4%
	100.0%	8001~10000	1.2%
		Over 10001	0.4%
			100.0%

TABLE II. MEASURES DESCRIPTIVE AND RELIABILITY STATISTICS

Measures	Items	Means	Coefficient $\alpha$
Complain frequency	1	-	-
Perceived norms	5	3.43	0.701
Perceived monitoring	2	3.538	0.885
Perceived apology	2	4.06	0.859
Accessibility of complaint channels	2	4.10	0.914
Recovery satisfaction	6	3.54	0.899
Consumers' repurchase intention	2	3.186	0.829

### I. Result

#### A. Sample Description

The characteristics of the sample are presented in Table I. Table I showed that most respondents were female (female 52.0%; male 48.0%), in the age of under25 (48.8%), with university degree (67.2%) and spend under 2000 dollars each time (75.0%).

#### B. Adequacy of Measures

In this study, relevant research constructs are directly derived from existing studies. As their construct validities have been previously proven by scholars, they are dependable. The authors conducted the reliability analysis by way of Cronbach's alpha coefficient to measure the internal consistency reliability of the constructs. Alpha reliabilities of these scales range from 0.701 to 0.914, demonstrating acceptable consistency. Table II displays the descriptive statistics and reliability indices for all the constructs.

#### C. Model Specification

In this study, the authors performed four regression analyses to analyze their hypotheses and added complaint frequency as a control variable. They are presented as follows.

Model 1:

- (1) Recovery satisfaction =  $\beta_0 + \beta_1$  (complain frequency) +  $\beta_2$  (perceived norms) +  $\beta_3$  (perceived monitoring) +  $\beta_4$  (perceived apology) +  $\beta_5$  (accessibility of complaint channels) +  $\epsilon$
- (2) Repurchase intention =  $\beta_0 + \beta_1$  (complain frequency) +  $\beta_2$  (recovery satisfaction) +  $\epsilon$
- (3) Repurchase intention =  $\beta_0 + \beta_1$  (complain frequency) +  $\beta_2$  (perceived norms) +  $\beta_3$  (perceived monitoring) +  $\beta_4$  (perceived apology) +  $\beta_5$  (accessibility of complaint channels) +  $\epsilon$
- (4) Repurchase intention =  $\beta_0 + \beta_1$  (complain frequency) +  $\beta_2$  (perceived norms) +  $\beta_3$  (perceived monitoring) +  $\beta_4$  (perceived apology) +  $\beta_5$  (accessibility of complaint channels) +  $\beta_6$  (recovery satisfaction) +  $\epsilon$

## D. Correlation Matrix

The correlation matrix is shown in Table III.

TABLE III. CORRELATION MATRIX

Measures	1	2	3	4	5	6	7
1. Complain frequency	1	-	-				
2. Perceived norms	-0.125*	1					
3. Perceived monitoring	-0.184**	0.433***	1				
4. Perceived apology	0.004	0.044	0.071	1			
5. Accessibility of complaint channels	0.043	0.086*	0.140*	0.344**	1		
6. Recovery satisfaction	0.128*	0.430**	0.324**	0.177**	0.302**	1	
7. Consumers' repurchase intention	-0.245***	0.280**	0.293**	0.220*	0.272**	0.591**	1

\*P<0.1, \*\*P<0.05, \*\*\*P<0.01, \*\*\*\*P<0.001

## E. Results of Regression Analysis

Table IV shows the results of the test. All of the F-statistics are significant at the  $p < 0.001$  level, thus showing good fit of the models to the data, whereas the constructs account for a sizable proportion of the variance in dependent variables.

From Table IV, the results of testing hypotheses 1-1 to 1-4 involved regression (3) are as follows: H1-1, which hypothesizes that the perceived norms is positively associated with consumers' repurchase intention, is supported ( $\beta = 0.168$ ,  $p < 0.01$ ). H1-2, which claims that perceived monitoring is associated with consumers' repurchase intention, is supported ( $\beta = 0.145$ ,  $p < 0.05$ ). H1-3, which hypothesizes that perceived apology influence is positively associated with consumers' repurchase intention, is not supported. H1-4, which claims that accessibility of complaint channels is positively associated with consumers' repurchase intention, is supported ( $\beta = 0.2$ ,  $p < 0.01$ ).

The results of testing hypotheses 2-1 to 2-4 involved four regression analyses are as follows: Regression (1) perceived norms ( $\beta = 0.344$ ,  $p < 0.001$ ), perceived monitoring ( $\beta = 0.124$ ,  $p < 0.05$ ), accessibility of complaint channels ( $\beta = 0.144$ ,  $p < 0.1$ ), are significantly related to recovery satisfaction. Regression (2) shows that recovery satisfaction is positively associated with consumers' repurchase intention ( $\beta = 0.569$ ,  $p < 0.001$ ). Compare regression (3) and regression (4), the relationship between complain frequency and consumers' repurchase intention was weakened by the inclusion of recovery satisfaction. recovery satisfaction plays mediating role in the relationship of complain experience and consumers' repurchase intention ( $\beta$  dropped from -0.172 to -0.170) was supported. It follows that H2-1 hypothesis—"recovery satisfaction plays a mediating role in the relationship of perceived norms and consumers' repurchase intention ( $\beta$  dropped from 0.168 to -0.005)" was supported. It follows that H2-2 hypothesis—"recovery satisfaction plays a mediating role in the relationship of perceived monitoring

and consumers' repurchase intention ( $\beta$  dropped from 0.145 to

TABLE IV. RESULTS OF REGRESSION ANALYSIS

	Dependent variable			
	Regression(1) Recovery Satisfaction	Regression(2) Repurchase Intention	Regression(3) Repurchase Intention	Regression(4) Repurchase Intention
1. Complain frequency	-0.072 (-1.317)	-0.172** (-3.447)	-0.206*** (-3.626)	-0.170** (-3.396)
2. Perceived norms	0.344*** (5.772)		0.168** (2.715)	-0.005 (-0.81)
3. Perceived monitoring	0.124* (2.043)		0.145* (2.304)	0.083 (1.488)
4. Perceived apology	0.073 (1.284)		0.134* (2.255)	0.097* (1.858)
5. Accessibility of complaint channels	0.233*** (4.037)		0.2** (3.34)	0.083 (1.534)
Recovery satisfaction		0.569*** (11.389)		0.502*** (8.717)
F Statistic	19.511***	77.067***	14.436***	28.304***
R <sup>2</sup>	0.281	0.379	0.224	0.405
Adjusted R <sup>2</sup>	0.266	0.374	0.209	0.391
$\Delta R^2$	-	-	-	0.181

\*P<0.1, \*\*P<0.05, \*\*\*P<0.01, \*\*\*\*P<0.001

0.083)" was supported. The relationship between perceived apology and consumers' repurchase intention was weakened by the inclusion of recovery satisfaction. It follows that H2-4 hypothesis—"recovery satisfaction plays a mediating role in the relationship of accessibility of complaint channels and consumers' repurchase intention ( $\beta$  dropped from 0.2 to 0.083)" was supported.

## II. Conclusions

Results of this article show that the complaint experience has a significantly negative influence on repurchase intention. This means that the more frequently consumers complain, the less willing they are to purchase again. It is hence advised that businesses should minimize consumer complaints or add recovery measures. Perceived norms, perceived monitoring, and accessibility of complaint channels have a significantly positive effect on consumers' repurchase intention. This indicates that a transactional environment with established norms, monitoring mechanisms, and accessible for consumers to file complaints helps enhance the consumers' repurchase intention. It is hence advised that businesses establish adequate norms and monitoring mechanisms to help manage complaints and design readily accessibility of complaint channels for enhanced recovery outcomes. Perceived apology has a positive effect on consumers' repurchase intention. This shows that apologies are important to consumers. Businesses must adequately express their apologies to complaining customers.

Other than perceived apology, the hypothesis that recovery satisfaction plays the role of an intermediary among perceived norms, perceived monitoring, accessibility of complaint channels, and consumers' repurchase intention is supported. This means that recovery satisfaction is the premise to consumers' repurchase intention. We hence advise that businesses establish recovery norms, reinforce third-party



monitoring, and create easy operations to let consumers feel satisfied during the recovery process and accordingly enhance their repurchase intention. Academically, we advise that researchers in the future engage themselves in further exploration of affective factors in particular, such as perceived interaction and perceived responsiveness, or simply investigate consumer with complaint experiences in effort to obtain different findings.

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