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Comparing consumer complaint responses to online and offline environment

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Abstract

Purpose – The purpose of this study is to apply the theory of reasoned action (TRA) and the theory of planned behavior (TPB) to predict which factors can determine consumers' intentions to complain when they meet an online or offline service failure.

Design/methodology/approach – The method of obtaining quantitative data was that of the instrument of a survey questionnaire. Data were collected from 300 potential consumers to assess the influence of attitude, subjective norm, and perceived behavioral control on the intention to complain. Participants were assigned averagely and randomly to one of two conditions: online medium and offline medium. Two-stage structural equation modeling was employed to test hypotheses.

Findings – It was found that both the TRA and the TPB predict the intention to complain well, although the predictive power of the TPB is more robust than the TRA in online media and is weaker than the TRA in offline media. In particular, perceived behavioral control is a better predictor of intention to complain than is attitude or subjective norm in the online environment.

Research limitations/implications – This study assessed self-reported behavioral intention as part of its survey and, as a result, could have introduced unintentional inaccuracies.

Practical implications – The findings of the study will help marketers to address the key factor which influences consumers' intention to complain and to improve firm performances to meet consumer needs.

Originality/value – The TRA and TPB are novel and usable in explaining the intention of online and offline consumers to complain, and these findings may be generally applicable to marketers and consumers.

Keywords Consumer behaviour, Complaints, Service failures, Internet, Taiwan

Paper type Research paper

Introduction

Service failures that cause customer dissatisfaction are inevitable even in the best-run stores. Some dissatisfied customers will not give service providers a chance to remedy the problem, either because they feel that the seller will not be willing to remedy the problem or because they are generally reluctant to complain (Blodgett *et al.*, 1995). Thus, service providers should encourage their customers to complain if they experience service failures. Complaints may encourage suppliers to improve goods and services and, thus, produce some lasting benefit (East, 2000). Furthermore, compared to traditional shopping, finding things online is pretty easy. Consumers just open up a search engine like Google and type in what they are looking for. This is probably the

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biggest advantage of online shopping vs traditional shopping. Because online consumers can easily compare alternatives, especially for functional products and services (Shankar *et al.*, 2003), this gives them easy options to go to other retailers if they are dissatisfied. Just as online consumers have more ready access to alternatives than do offline consumers, their responses to service failures in online settings could be different from those of offline customers (Harris *et al.*, 2006).

The current research focuses on how online and offline consumers differ in their perceptions of service failures and the intent to complain. With a quarter of a billion Internet users worldwide, an increasing number of customers are using information technology to handle their complaints (Mattila and Mount, 2003). Compared to the offline environment, the online environment offers more opportunities for personalized marketing (Wind and Rangaswamy, 2001), which could enhance customers' sense of control and influence them to express dissatisfaction differently in the online environment *vis-à-vis* the offline environment.

This study draws on the consumer's intention of complaint literature and applies the theory of reasoned action (TRA) and the theory of planned behavior (TPB) to develop and experimentally test a conceptual framework that links the service medium (online versus offline purchasing) with intention to complain.

Literature review and hypotheses development

The TRA

The TRA assumes that favorable attitudes and subjective norms inevitably lead to intentions (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980; Fishbein, 1980). This intention to act is a function of two determinants, one that is personal and one that reflects social influence (Ajzen and Fishbein, 1980). The attitudinal component is the individual's attitude toward the behavior or act (i.e., an evaluation of the behavior as favorable or unfavorable), and the normative component is the subjective relative importance of the behavior or act. The role of these two determinants in predicting intention to act is expected to vary with the type of behavior and situation, and based on individual differences (Ajzen and Fishbein, 1973). Subjective norms – the belief that those whose opinions one values think one should or should not act in a particular way – contain strong cognitive elements that are based on the judged expectations of significant others. Attitudes – the pleasantness or unpleasantness of an act – are more affective and less cognitive in content than are subjective norms (Bagozzi *et al.*, 1992).

The TPB

Fishbein and Ajzen (1975) argued that attitude towards behavior is made up of beliefs about engaging in the behavior and the associated evaluation of the belief. Ajzen (1985) extended the TRA by including another construct, perceived behavior control, to predict behavioral intention and behavior. Perceived behavioral control refers to "people's perception of the ease or difficulty of performing the behavior of interest" (Ajzen, 1991). If behavior is not under complete volitional control, the performers need to have the requisite resources and opportunities to perform the behavior. Their perception of whether they have the resources will affect their intention to perform the behavior, as well as the successful performance of the behavior.

The TPB (Ajzen, 1985, 1991) posits that both attitude toward a behavior and subjective norms are immediate determinants of intention to perform a behavior.

Attitude toward a behavior is a person's positive or negative evaluation of a relevant behavior and is composed of a person's salient beliefs regarding the perceived outcomes of performing that behavior. On the other hand, subjective norm, a function of normative beliefs, represents a person's perception of whether significant referents approve or disapprove of a behavior. The TPB further proposes that intention to perform a behavior is the proximal cause of such a behavior. Intention is the motivational component of a behavior, that is, the degree of conscious effort that a person will exert in order to perform a behavior. To capture the non-volitional aspects of behavior, the TPB incorporates an additional variable not typically associated with traditional attitude-behavioral models (e.g., Fishbein and Ajzen, 1975) by proposing that perceived behavioral control, in conjunction with attitude and subjective norms, is a direct predictor of behavioral intention. Perceived behavioral control is the perception of the ease or difficulty in performing a behavior. The aspect of ease or difficulty specifically relates to whether a person perceives that he/she possesses the requisite resources and opportunities necessary to perform the behavior in question. Empirical evidence indicates that the addition of perceived behavioral control to the traditional attitude-behavioral model has resulted in meaningful improvements in the prediction of intentions (Ajzen, 1991).

In the present study, a model of consumer intention to complain was developed to compare the predictors of intention to complain for both online and offline retailers. This integrated model was modified from the TPB (Ajzen, 1985, 1991), in addition to inputs from other relevant literature. Figures 1 and 2 show the hypotheses that led to the development of the model of consumer intention to complain. These factors can be applied to both online and offline environments. Complaints toward offline retailers always require face-to-face communication with salespeople, so we infer that attitude toward complaining and subjective norms are important predictors of whether complaints are made. In this context, the TRA can provide an acceptable fit. Moreover, the effects of perceived behavioral control when customers use the Internet for retail shopping will play a more important role than it would in the offline environment. As a

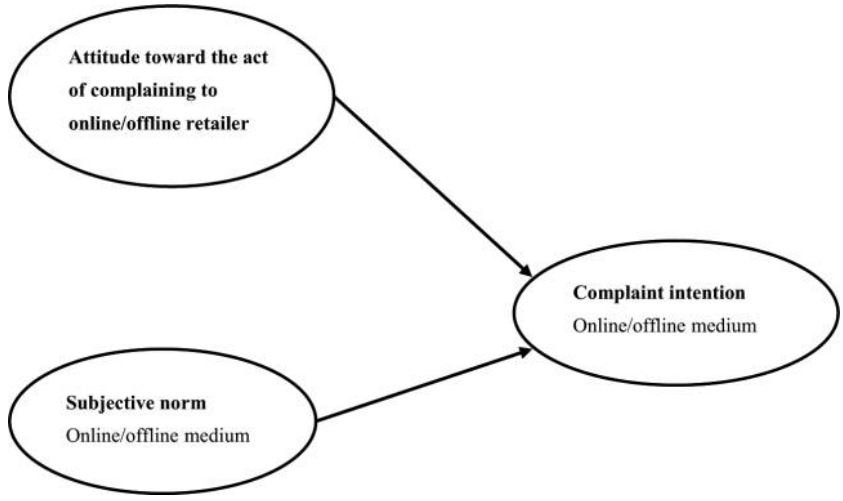


Figure 1.
The structure of the complaint intention for the TRA

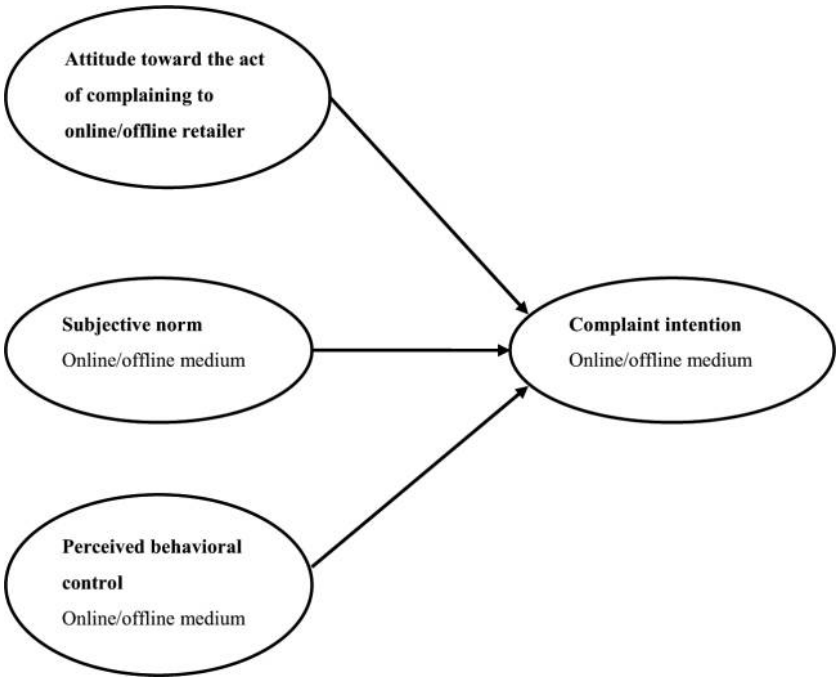


Figure 2.
The structure of the complaint intention for the TPB

result, we expect that the additional attribute in the TPB will have significant effects on predicting the intention to complain, and the TPB will show a better model-fit in the online environment than will the TRA in the offline environment:

H1a. In online media, the TPB will predict the intention to complain better than will the TRA. That is, perceived behavioral control will play a more important role in online media than in offline media.

H1b. In offline media, the TRA will predict the intention to complain better than will the TPB. That is, positive attitudes toward complaining and social norms will play more important roles in offline media than in online media.

Intention to complain

The TRA and the TPB cannot clarify how intention translates into behavior or why people cannot always behave in accordance with their intentions (Bagozzi *et al.*, 1992). This study, unlike previous research on the subject, separated the complaint behavior and the intention to complain into different dimensions. Intention summarizes the person's motivation to perform a behavior and indicates the amount of time and effort that s/he is prepared to devote to ensuring that a particular action is undertaken (Ajzen, 1991). Extending Ajzen's definition of intention, intention to complain is defined as the intention of the dissatisfied consumer to make a complaint to the firm (Kim *et al.*, 2003). The research model in this study suggests that intention to complain is dependent on the key variables: attitude, subjective norm and perceived behavioral control.

Attitude toward complaining

Attitude toward complaining is defined as "the overall affect of 'goodness' or 'badness' of complaining to sellers and not specific to a specific episode of dissatisfaction" (Singh and Wilkes, 1996). The importance of attitudes in relation to complaining was well documented by Hirschman (1970), whose theoretical framework for understanding complaint and exit behaviors posits that attitude toward complaining, along with value of complaint and likelihood of the complaint's success, has a significant influence on complaint behavior. Consumers with positive attitudes toward complaining are expected to be less likely than those reluctant to seek redress to engage in negative intention and behavior, such as negative word-of-mouth communications and exit (Day and Landon, 1977). In other words, consumers with positive attitudes toward complaining will express the complaints because they have the likelihood to repurchase and retain. Indeed, Kim *et al.* (2003) found that intention to complain is positively influenced by favorable attitudes toward complaining.

Developed as an extension of Fishbein and Ajzen's (1975) model of attitude toward intention and behavior, we infer that a consumer's attitude toward complaining positively relates to the intention to complain:

H2. The effect of positive attitudes toward complaining on intention to complain in offline environments will be greater than that in online environments.

Subjective norm

Subjective norms are a combination of perceived expectations from relevant individuals or groups and intention to comply with these expectations. The contribution of the opinion of any given referent is weighted by the motivation that an individual has to comply with the wishes of that referent, that is, "the person's perception that most people who are important to him or her think he should or should not perform the behavior in question" (Fishbein and Ajzen, 1975). Given that subjective norm is tied to peer influence and the influence of one's superiors (Mathieson, 1991; Taylor and Todd, 1995), it is expected that intention to complain will be closely linked to the complainers' social influences from family, friends and peers. Therefore, the overall subjective norm can be expressed as the sum of the individual perception and motivation assessments for all relevant referents:

H3. The effect of the social norm on intention to complain in offline environments will be greater than that in online environments.

Perceived behavioral control

Perceived control is a "person's belief as to how easy or difficult performance of a specific behavior would be" (Ajzen, 1988). The concept of perceived behavioral control is most compatible with Bandura's (1977, 1982) concept of perceived self-efficacy, which is concerned with judgment about how well one can execute required actions to deal with specific situations. Fishbein and Cappella (2006) stated that self-efficacy is the same as perceived behavioral control in their integrative model; Ajzen (2002) also measured perceived behavioral control using items of self-efficacy. In a technology-based context, consumers perform even more of the service and have more control over the delivery of the service (Rust and Lemon, 2001); they also have more control over how to respond to service failures. Hence, in addition to measuring

the TRA variables, perceived behavioral control is important in explaining consumers' complaint responses in online settings:

H4. The effect of perceived behavioral control on intention to complain in online environments will be greater than that in offline environments.

Method

Research design and procedure

A two-group quasi-experimental research design was employed to capture the differences between media in cases of service failure. Respondents in Group 1 evaluated an online service failure and completed a questionnaire regarding with what complaint attitude, subjective norm and perceived behavioral control they would react with online/offline retailers. In Group 2, respondents evaluated an offline service failure and completed the same questionnaire as did Group 1. Two different scenarios were manipulated for a service defined as ordering a group tour on a travel web site or at a travel agency. Participants read scenario descriptions about a hypothetical service failure problem before responding to the questionnaire. The scenarios read by study participants are provided in the Appendix.

Participants

The sample was extracted from senior-year undergraduate students taking a Consumer Behavior course at a large university located in northern Taiwan. To qualify, participants had to have shopped at an online store before so that a homogenous sample was distributed to the online and the offline scenarios. The sample consisted of 46 percent males and 54 percent females, and the age range of the participants was 21-25.

Measures

The study measured the intention to complain toward online retailers or offline retailers with behavior expectations in the same manner as Kim *et al.* (2003) adapted from Day *et al.* (1991) and Singh (1989). Using a five-point scale (*1 = completely* disagree; *5 = completely* agree), subjects responded to questions about the likelihood of complaining to an online or offline retailer after a service failure.

Intention to complain (INT). Respondents' intention to complain to online or offline retailers was measured using three items. Responses to the three items were averaged, and this average represented the participant's complaint intention score.

Attitude toward complaining (ATT). Seven items were used to assess attitude about complaining to online or offline retailers. Using five-point Likert-type scales, respondents were asked to express their attitude about complaining, and an average score for the seven items was computed for each respondent.

Subjective norm (SN). Three separate measures were used to measure subjective norm. One (SN1) was the standard East (2000) item, "My family think I definitely should complain toward online/offline retailers". The second measure (SN2) was determined by the response to the question, "My friends think I definitely should complain toward online/offline retailers". The third measure (SN3) was based on the response to the question, "My classmates think I definitely should complain toward online/offline retailers". To compute the subjective norm, responses to the three questions were averaged.

Perceived behavioral control (PBC). Perceived behavioral control was measured with items, such as "keeping the receipt," that addressed the amount of control participants perceived they had in case of service failures. The four items were averaged for the perceived behavioral control score.

Analysis of measure

According to the two-step procedures by Anderson and Gerbing (1985), the first step is to develop the measurement model with good fitness using the confirmatory factor analyses (CFAs). In the first step, a confirmatory factor analysis (CFA) was performed to determine whether the measured variables reliably reflected the hypothesized latent variables (attitude, subjective norm, perceived behavioral control and intention to complain). As shown in Table I, convergent validity was examined through composite reliability. The composite reliability of 0.63-0.75 for both constructs is above the recommended guideline of 0.60 (Bagozzi and Yi, 1988). Fornell and Larcker (1981) suggested that discriminant validity is established if the square root of the average variance extracted (AVE) for an individual construct is greater than the correlation of that construct with other constructs. Table I shows that this condition is met in all cases.

In the second step, a series of structural equation path models were tested in order to (1) determine the adequacy of the TRA in explaining the intention to complain (Model 1); (2) test whether the TPB predicts the complaint behavior better than the TRA (Model 2); and (3) compare the causal path (attitude, subjective norm, and intention to complain) between the two media (online vs. offline).

Results

The causal model was assessed using latent variable structural equation modeling in AMOS 17.0. However, past researchers (e.g., Hair *et al.*, 1998) recommended that the χ^2 measure should be complemented with other goodness-of-fit measures. The fitness of Model 1 from this analysis was chi-square = 112.73/115.65 (online/offline medium), $df = 62$, $p < 0.001$). In Model 2, the overall fit of the model was also significant in online and offline media. Further, additional goodness-of-fit indices, including the standardized root mean square residual (RMR), the root mean square error of approximation (RMSEA), the comparative fit index (CFI), the normed fit index (NFI), the parsimonious normed fit index (PNFI), the goodness-of-fit index (GFI), the parsimony goodness of fit index (PGFI), and minimum discrepancy divided by the degrees of freedom the minimum discrepancy (CMIN/DF), were all at acceptable levels, indicating that the model fit the data well (Bagozzi and Yi, 1988). Point estimates of RMR smaller than 0.05 were preferable (Byrne, 2001). The estimations of RMSEA were less than 0.08, which indicated a reasonable fit of all the estimated models in relation to

Construct	Composite reliability	ATT	SN	PBC	INT
ATT	0.72	*0.69*			
SN	0.63	0.32*	*0.59*		
PBC	0.75	0.34*	0.23*	*0.68*	
INT	0.66	0.26*	0.15*	0.09*	*0.58*

Table I.
Correlations of latent variables and AVEs

Notes: *$p < 0.05$; values on the italics diagonal are the square roots of the AVEs

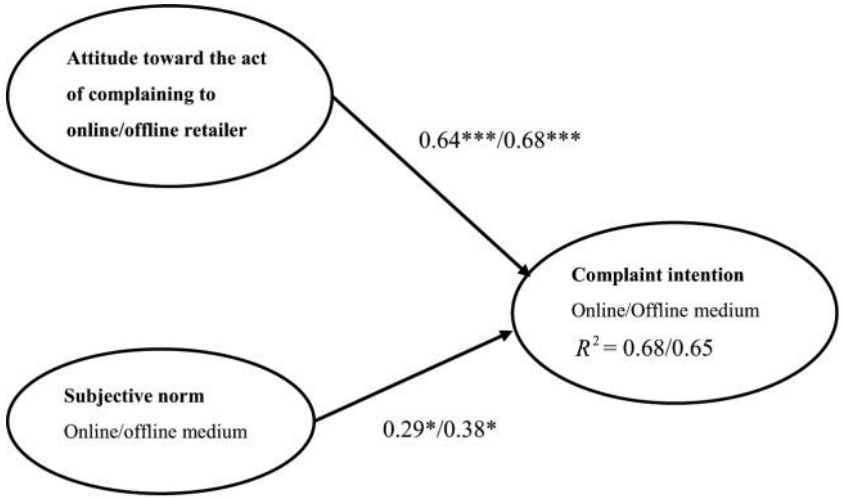
the degrees of freedom (Browne and Cudeck, 1993). The values of CFI were above 0.95 for all the estimated models. The Bentler and Bonett normed fit index (NFI) showed values above 0.90. The values of ANFI above 0.50 indicate a very good fit (Diamantopoulos and Siguaw, 2000). In addition, the values of the goodness-of-fit index (GFI) were above 0.90 for all the estimated models, indicating a good absolute model fit. The values of PGFI were ≤ 0.50 are reasonable (Diamantopoulos and Siguaw, 2000). In general, a CMIN/DF (minimum discrepancy divided by the degrees of freedom) statistic of less than 5 is considered adequate, with lower values being superior (Byrne, 1989). Fit indices varied greatly in their reliability of estimation and sensitivity to sample size. In all, then, acceptable support was provided for the models as proposed (see Table II).

As shown in Figures 3 and 4, and Table III, the χ^2 value difference ($p < 0.001$) between the null model and the restricted model is used to test the equality of the path

Model	χ^2	df	$\Delta\chi^2$	RMR	RMSEA	CFI	NFI	PNFI	GFI	PGFI	CMIN/DF	R^2
Online												
Null model	123.87	63										
TRA	112.73	62	11.14*	0.01	0.04	0.99	0.95	0.65	0.94	0.68	1.21	0.68
TPB	59.50	61	48.36*	0.19	0.05	0.95	0.92	0.68	0.92	0.67	1.06	0.75
Offline												
Null model	148.78	63										
TRA	115.65	62	33.13*	0.02	0.02	0.99	0.93	0.76	0.91	0.69	1.21	0.65
TPB	112.56	61	3.09*	0.02	0.04	0.95	0.92	0.64	0.91	0.67	1.18	0.57

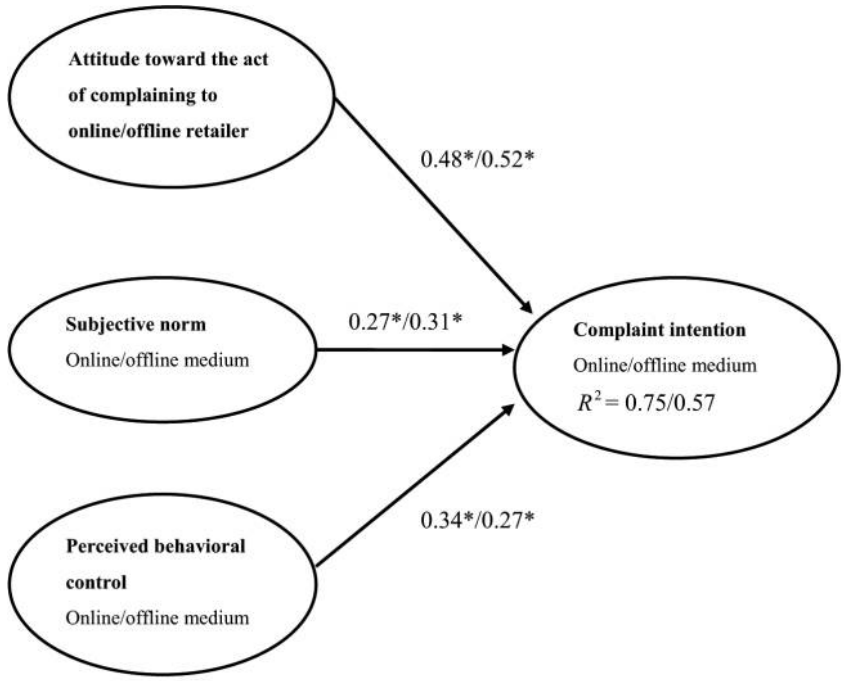
Notes: R^2 show the proportion of the variations of the variable that can be explained by its causing components; *significant at 0.1 percent

Table II.
Model comparisons and fit measures



Notes: R^2 show the proportion of the variations of the variable that can be explained by its causing components. *Significant at 5%; **Significant at 1%; ***Significant at 0.1%

Figure 3.
Path coefficients of the TRA (online/offline medium)



Notes: R^2 show the proportion of the variations of the variable that can be explained by its causing components. *Significant at 5%; **Significant at 1%; ***Significant at 0.1%

Figure 4.
Path coefficients of the TPB model (online/offline medium)

	γ coefficient		The difference between the restricted model and the base model	
	Online	Offline	$\Delta\chi^2$	p value
TRA				
The effect of attitude on intention to complain	0.68	0.64	0.11	0.04*
The effect of subject norm on intention to complain	0.29	0.38	0.23	0.02*
TPB				
The effect of attitude on intention to complain	0.48	0.52	0.09	0.05*
The effect of subject norm on intention to complain	0.27	0.31	0.13	0.01**
The effect of perceived behavioral control on intention to complain	0.34	0.27	0.21	0.00***

Notes: $\Delta\chi^2$ = the difference of $\Delta\chi^2$ value between the restricted model and the base model; * significant at 5 percent; **significant at 1 percent; ***significant at 0.1 percent

Table III.
The results of the online and offline media in the TRA and TPB

coefficient. The results of the equality constraint model also showed that γ coefficients depicting the relationship between perceived behavioral control and intention to complain were significantly different between the two groups ($p < 0.05$) (Table III). Also, Model 1 tested the validity of the TRA in predicting the intention to complain; it explained 68 percent of the variation in the intention to complain (i.e., R^2) in offline media, which was better than its explanatory power in online media. Thus, Model 1 fit the intention to complain toward offline retailers well, so *H1a* was supported.

Model 2 fit the data adequately and explained 75 percent of the variation in the intention to complain in online media, which was an even better level of explanation than that provided by Model 1. Therefore, *H1b* was supported. Among the two alternative models, the combination of attitude toward complaining, subjective norm, and perceived behavioral control were positively significant for the intention to complain. However, in offline media, relative to perceived behavioral control, positive attitudes toward complaining and social norms have significant effects in explaining intention to complain, while in online media, perceived behavioral control will play the most important role in predicting intention to complain. As a result, *H2-H4* were supported.

Discussion and conclusion

Although many studies in the marketing literature have examined the intention to complain in offline settings (East, 2000; Voorhees and Brady, 2006) and in online contexts (Kim *et al.*, 2003; Rust and Lemon, 2001), less work has been done to compare the intention in the two environments. This study fills that void. The results of this study offer encouraging evidence that the TRA and TPB can help explain the differences between consumers who complain to online retailers and those who complain to offline retailers. The TRA explains approximately 68 percent of the variance in consumer intention to complain to offline retailers, whereas the TPB explains approximately 75 percent of the variance in consumer intention to complain to online retailers.

In addition to demonstrating that the TRA and TPB provide an acceptable fit to the data, another purpose of this study was to compare the predictive power of the two theories. The study demonstrates that perceived behavior control will be a robust predictor of intention to complain, and we expect the perception of level of control in complaining to online retailers to be higher than that of complaining to offline retailers. The effects of the predicting factors (attitude, subjective norm, and perceived behavioral control) on the intention to complain may also differ. Findings show that the causal factors in the two environments appear to differ significantly in their ability to predict the intention to complain.

Consequently, in online media, perceived behavioral control adds significant explanatory power in predicting the intention to complain. This result is consistent with that of Fortin (2000), who explained that perceived behavioral control was a key determinant for behavioral intention in the online environment. Therefore, with respect to the online customers' evaluations of electronic encounters, the focus in our study is on the perceived behavioral control in intent to complain to online retailers. The positive effect of attitude and subjective norm on intention to complain in an offline environment is more significant than that in an online medium. That is, complaining to

offline retailers requires a face-to-face talk, so consumers' attitudes and subjective norms will significantly determine their intention to complain.

Managerial implications

This study demonstrates the prevalence of the intention to complain, which has serious implications for the retail industry. First, the study demonstrates how intention to complain could be encouraged by altering the TRA/TPB variables because consumers' complaints can provide a second chance for the retailers to improve service and please the customer. Both online and offline retailers can use the outcome of this research when designing strategies to enhance consumers' intention to complain. By understanding the key factors that determine intention, retailers can also develop better complaint management. Effort must also be made to develop a favorable attitude among customers toward complaining and to eliminate customer communication constraints that result from lack of confidence, negative influences, and so on.

Second, subjective norms directly affect the intention to complain in both online and offline environments. When consumers are considering complaining, their intention will be affected by social influences such as peers' opinions. Retailers can use normative social pressure to induce subjective norms related to protecting customers' rights, thus increasing the individual's intention to complain. Retailers know that a company's reputation is developed through word-of-mouth, so making efforts in the area of positive word-of-mouth can help in stimulating consumers' intention to complain.

Finally, perceived behavioral control was shown to increase the predictability of intention to complain about online transactions. In order to enhance the amount of perceived behavioral control, retailers may use strategies to create an easy online encounter, such as building an effective self-service design to increase the flexibility of navigation and to improve customer service (e.g., Childers *et al.*, 2001; Grembler and Gwinner, 2000).

Limitations and suggestions for future research

This study identifies a number of variables important to complaint management and raises a number of questions that would benefit from more research. First, it would be interesting to investigate consumer complaints across industries, as varying the TRA/TPB variables will have an impact on the intention to complain. Further research could include comparative research of intention to complain between industries.

Second, this study focuses on students in one university in Taiwan and does not cover students in other universities. Although the objective of this research, which is to test the outcome of the potential complainer's intention, has been achieved, future research should address other locations within and outside Taiwan. Finally, this research represents a snapshot of the online and offline complaining phenomenon and attempts to predict the complaint pattern based on cross-sectional behavioral measures of complaining. A longitudinal study tracing individuals' complaint intentions may yield a richer understanding of behavioral patterns, critical factors, and how these are shaped over time.

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Appendix

Scenario 1

Please imagine that you found a well-known tour website and booked a three-day, two-night Hualien city tour for couples for NT $ 9,888 on January 10. The trip is scheduled for February 8-10. Before that date, however, you received an e-mail informing you that the travel package was cancelled because of insufficient travelers signing up for the trip. The service provider gave you two choices: you could change the travel destination or you could receive a refund for your purchase.

Scenario 2

Please imagine that you found a well-known travel agency and booked a three-day, two-night Hualien city tour for couples for NT$9,888 on January 10. The trip is scheduled for September 8-10. Before that date, however, you received a phone call informing you that the travel package was cancelled because of insufficient travelers signing up for the trip. The service provider gave you two choices: you could change the travel destination or you could receive a refund for your purchase.

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