

The Moderating Effect of Disposition to Trust in Online Services

Y.W. Fan & J. C. Chen

Dept. of Information Management

National Central University

Jungli, Taoyuan, Taiwan, R.O.C

iwfan@mgt.ncu.edu.tw

Abstract

With the advent of Internet applications, growing number of organizations and individual sellers are trying to take advantage of E-commerce (EC). EC environment is quite different from traditional business environment because transaction participants can easily remain anonymous. Trust, therefore, has been considered more critical in EC environment. In order to induce trust, many online services have emerged to provide seller's reputation information. This research investigates the moderating effect of disposition to trust for these online services. It is found that people with low trust propensity are not rash to trust others. They need evidences to convince them, so positive rating on trust for low trust propensity situation has more effect than positive rating on trust for high trust propensity situation. The research findings suggest personality traits such as disposition to trust can also be taken into considerations for marketing segmentation decisions.

Keywords: Online-service, moderating effect, disposition to trust

1. Introduction

With the wide explosion in information technology and communication technology development and the advent of Internet applications, E-commerce (EC) emerges rapidly. With the increasing Internet users, EC activities have been growing at an exponential rate [8]. According to IDC, increasing numbers of new buyers and existing buyers are moving a larger proportion of their spending to online commerce or service.

Given the impersonal nature of the EC environment, trust is considered more critical than ever[2]. In an effort to induce trust, many online services have emerged to provide seller's reputation information to all potential buyers. For example, eBay's Feedback Forum allows buyers to comment on their transaction experience with sellers and to rate the quality of the service provided by the sellers. This kind of online services and mechanism help build trust among the potential trading parties in an online environment [38].

Although most researchers and practitioners agree

that this kind of online service and mechanism is important for trust-building in EC environment, substantial confusion persists as to whether personality traits, such as disposition to trust, have moderating effects to influence the association between specific feedback mechanism and trust. Thus, this study aims to examine the extent to which trust can be induced by specific feedback mechanisms in EC environment, and to investigate the moderating effect of disposition to trust in these online services. Specifically, this study attempts to answer the following research questions:

- (1) Do online feedback mechanisms induce buyers' trust in buyer-seller relationships?
- (2) What are the impacts of positive and negative feedback ratings on buyers' trust formation?
- (3) Does disposition to trust have moderating effects on the association of feedback mechanism and trust?

The rest of this paper is organized as follow: the second section reviews the related literature on trust and disposition to trust. The third section presents the research model of this study, methodology, and related hypotheses. The results and findings of the online experiment are included in the forth section. The final section discusses the findings, limitations of this study, and suggestions for future research.

2. Conceptual Background

Online Feedback Mechanism

Feedback mechanisms are one kind of online service widely used in many EC transactions, such as online auction sites. For example, eBay's Feedback Forum provides a place where users can leave comments about their buying and selling experiences at eBay and their evaluations of the buyers and sellers with whom they transact. It accumulates and disseminates feedback about past trading behaviors of buyers and sellers, helping all users decide whom to trust and discouraging opportunistic behaviors[2].

As to how this kind of online service actually works, the following reputation system procedures illustrate the detail events. First, users register and provide some basic

information to auction sites such as eBay, Yahoo! Auction before they participate in any auctions. Next, registered users participate in EC transactions. Then, users can publicize their opinions about their EC transactions by utilizing the online service provided by online feedback mechanism. However, The only information that auction site verifies, at least for buyers, is that the email address is valid. Not all of the information provided to auction site is made visible to other users. As part of the registration process, the user may choose an online pseudonym or account. This pseudonym or account, rather than the full name provided to auctioneers, is shown to other users when using auction services. Users can request the email address associated with any pseudonym. In general, auctioneers do not reveal the real names and physical addresses to other users. Since there are many ways to sign up for free email addresses at services like Yahoo or HotMail, this mechanism means that anyone who wants to remain anonymous has the ability to do so.

Although buyers and sellers can leave comments about each other after each transaction, none are required to do so. Each feedback comment contains text description and a numeric rating of +1(positive), 0(neutral), or -1(negative). All feedbacks are tied to a transaction, and only the seller and winning bidder can leave feedback about each other. If both buyer and seller transacted more than one time, they can only leave one comment for each other.

Despite that online feedback service mechanism provides an approach to know each buyer and seller's performance in the past, it still has some limitations. First, users can change the pseudonym presented to others at any time. It is possible for anyone to get a new email address, and to register completely anew, thus leaving behind one's previous feedback. Second, a user can disguise himself as trustworthy person by registering different accounts, leaving himself positive ratings, and attempting to do some opportunistic behavior.

Trust

According to the Oxford Dictionary, trust is defined as "confidence in or reliance on some quality or attribute of a person or thing, or the trust of a statement" . The notion of trust has been always paid much attention to by many sociologists in many disciplines. For example, many researchers have argued that trust is essential for understanding interpersonal behavior and economic exchanges[41, 18].

Trust is also important in the research of adoption of new technologies, including the Web and e-commerce[8, 42]. Trust is crucial in many aspects such transactional, buyer-seller relationships, especially those containing risk, including interacting with an e-vendor[42, 25]. That is, trust is vital in many business relationships and actually determines the nature of many businesses and the social order [14].

Although the importance of trust is widely recognized in many disciplines, there is widespread disagreement about its definition, characteristics, and antecedents. Mayer, Davis, and Schoorman (1995) have identified the following five issues that summarize the root of this disagreement : (1) the difficulty of defining trust, (2) confusing trust with its antecedents and outcomes, (3) failing to clearly understand the relationship between trust and risk, (4) confusing the levels of analysis due to lack of specificity of trust referents, and (5) failing to consider both the trusting party and the party to be trusted[16].

Researchers in different disciplines agree on the importance of trust in the conduct of human affairs, but there also appears to be equally widespread lack of agreement on the major concepts of trust. Social psychologists define trust as an expectation about the behavior of others in transactions, focusing on the contextual factors that enhance or inhibit the development and maintenance of trust. Economists and sociologists have been interested in how institutions and incentives are created to reduce the anxiety and uncertainty associated with transactions [41].

Based on the discussion in previous section, this research defines trust to be one's belief about the event that the other party will behave in a socially responsible manner, and will fulfill the trusting party's expectations without taking advantage of its vulnerabilities [8, 16].

Trust-related behaviors were also studied by Ba and Paulov [2]. Their study found that appropriate feedback mechanisms can induce calculus-based credibility trust. However, personal traits, such as disposition to trust, are not included in these previous studies. Common trust-related behaviors discussed in electronic commerce include sharing personal information, increasing purchase intention, or repeating purchasing behaviors. Trust helps reduce the social complexity a consumer faces in e-commerce by allowing the consumer to subjectively rule out undesirable yet possible behaviors of the e-vendor, including inappropriate use of purchase information. In this way, trust encourages online customer business activities[9, 10].

In summary, prior research has verified a strong correlation between behavioral intentions and actual behavior. Thus, in online auction market, via trust-building mechanism (e.g. feedback mechanism, escrow services, credit card guarantees), buyers may be more confident in sellers' credibility, and willing to place a bid with specific sellers.

Disposition to trust

In psychology area, psychologists believe that personality traits will affect the reaction behaviors. Disposition to trust can be seen as one kind of personal trait and in general, it affects specific perceptions of

human beings (e.g. willingness to trust others).

Trust, in general, is likewise the result of a disposition to trust. This disposition is created through a lifelong socialization process that results in a tendency to, or not to, have faith in other people and to trust them [28]. When people enter a new relationship, before they have time to form an assessment of whether they can trust the other person or organization, this disposition is a major determinant of their trust. As the relationship matures and people have appropriate opportunities to assess whether they should trust the other person, the importance of this disposition in determining trust diminishes (McKnight et al., 1998).

Rotter [27] developed a scale for the measurement of interpersonal trust, “an expectancy held by an individual or group that the word, promise, verbal or written statement of another individual or group can be relied upon”. He viewed trust as a stable intra-individual characteristic that influenced interpersonal interactions with others. Following Rotter’s measure [27], Conlon and Mayer found that the willingness to trust others was significantly related to the behavior and performance of persons working in an agency simulation. It is also found in literature that propensity to trust had a strong impact on trust in virtual teams. McKnight and Chervany [18] provide a well-reasoned argument linking the two constructs of their disposition to trust concept—faith in humanity and trusting stance—with trusting beliefs. Trusting beliefs along with trust intentions in turn determine one’s trust-related Internet behaviors. Previous study also indicated that individual’s Tendency to Trust influences the human electronic commerce relationship, specifically by influencing an individual’s decision to trust the system.

3. Research Methodology

For the sake of risk inherent in online environment, a variety of online trust-building mechanisms have been proposed and adopted. How effective are these feedback mechanisms? Do they really have the influence over buyers and sellers? Does disposition to trust really have the moderating effect on this online service? The purpose of this study is, from buyer’s perspective, to examine how the feedback profile affects the buyers’ perception of trust in sellers, and validate the moderating effect of disposition to trust between feedback mechanism and trust. The research model is modified from the one of “Evidence of The Effect of Trust Building Technology in Electronic Markets: Price Premiums and Buyer Behavior” [2]. In their study, they examine the extent to which trust can be induced by proper feedback mechanisms in electronic markets, and explore the mediating role of trust on the relationship between feedback mechanisms and price premiums.

In the study, we focus solely on the relationship

between feedback mechanism and perception of trust in sellers. In addition, we take disposition to trust into consideration. The effects of the moderating factors on the relationship between feedback mechanisms and perception of trust in sellers are explored as moderating variables. The research model is illustrated in Figure 1 and discussed below.

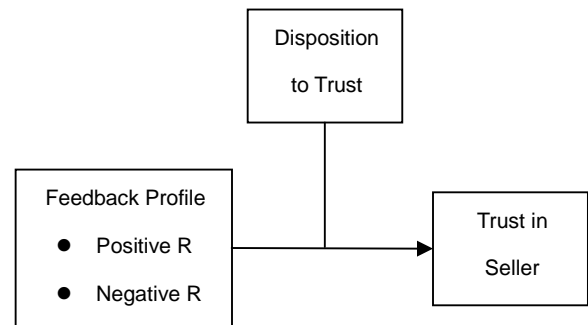


Figure 1. Research Model

Hypothesis Development

Research on brands has indicated that a brand name is an extrinsic cue to quality in that it provides consumers with a wealth of information about the product. According to signaling theory, in situations where there is information asymmetry (the level of quality is known by the seller but not by the buyer), the brand name, or reputation of the product/company, can function as a signal of quality. Therefore, consumers should believe a reputable brand’s signals of quality are credible given the negative consequences associated with false claims. In online environment, all users are anonymous, pseudonym name as your personal brand, and feedback content is just like your brand reputation.

Research shows that sellers’ reputation ratings are valued by online auction bidders for at least two reasons: first, because they have discriminative value, helping bidders to draw meaningful distinctions between sellers and facilitating their decisions regarding which item(s) to bid on, and which one(s) to avoid, and second because they have predictive value, since ratings received by sellers in the past are diagnostic of success (or failure) of future transactions with them [2, 26].

One distinct feature of online auctions is that the buyers and sellers do not meet face to face. It is often suggested that trust was necessary for buyers and sellers to participate successfully in an online trading community (e.g. eBay, Yahoo Auction). They also found that feedback mechanism on eBay is an essential part of the system and reduces risks associated with transactions.

Therefore, a seller with higher numbers of positive ratings should receive better treatment than a seller with deficient ratings. In this regard, feedback profile could function as brand reputation, signaling quality to bidders.

The existence of reputation information is an incentive for the participants in a transaction to be trustworthy because of the damaging effects of acquiring a bad reputation. Thus,

Hypothesis 1: The feedback mechanism is related to buyers' trust in seller's credibility.

In the same argument, buyers should prefer sellers with a long and unblemished feedback rating profile. A strong positive reputation reduces the risk for bidders. The reduced risk arises from the increase in assurance that the seller will complete the transaction as contracted. This gives the reputable e-commerce seller a strategic advantage over other's selling similar products but having less positive reputations. Buyers will calculate that seller with more positive reputation is less likely to destroy a good name to exploit a single transaction [30]. Under normal condition, buyers will believe that sellers who have accumulated good feedback ratings would incur higher cost due to unfair behaviors, and thus would be less likely to have opportunistic behaviors. Thus,

Hypothesis 2: With no negative rating, a great number of positive ratings induce stronger buyers' trust in seller's credibility.

Feedback ratings consist of positive and negative ratings. A negative reputation increases the risk for potential bidders. The increased risk arises from the decrease in assurance that the seller will complete the transaction as contracted [34]. According to previous studies, negative messages have a harmful effect on unfamiliar brands. Lee et al. [13] validated that higher negative feedback ratings result in lowering bidding prices in Internet auctions. Both positive and negative reputations are predicted to have an effect on the ability of a seller to command a premium price. However, positive and negative feedback ratings are not predicted to have equivalent effect [34]. Thus, negative feedback is likely to have a very strong negative effect than positive feedback on buyers' trust perception.

Hypothesis 3: Negative ratings have greater opposing effect than positive ratings in inducing buyers' trust in seller's credibility.

Disposition to trust is the extent to which a person displays a tendency to be willing to depend on others across a broad spectrum of situations and persons [19].

Propensity to trust is proposed to be a stable within-party factor that will affect the likelihood the party will trust [16]. It is an individual difference factor that may affect interpersonal trust. McKnight et al. (2002) supposed that initial trust between parties will not base on any kind of experience with, or firsthand knowledge of, the other party. Rather, it will be based on an individual's disposition to trust or on institutional cues that enable one person to trust another without firsthand knowledge [19].

The impact of the trust antecedents can be influenced by the disposition to individual trust. People with different developmental experiences, personality types, and cultural backgrounds vary in their propensity to trust. Trust propensity is formed through socialization and life experience and is invariant across situations [8]. In the study, we assume feedback mechanism as an antecedent factor affecting buyers' perception trust in sellers' credibility. The propensity to trust is a personality trait that moderates the effect of trustworthiness attributes on the formation of trust [16]. This moderation effect acts positively in the sense that the higher the level of trust propensity, the greater the impact of trust attributes on the formation of trust [14].

In the study, according to the research of Mayer et al. [16] and Lee et al. [13], we assume that disposition to trust will have a moderating effect on the relationship between trust and its antecedent.

Hypothesis 4: There is a moderating effect of disposition to trust on the relationship between feedback mechanism and trust in seller's credibility.

Research Design

An Internet survey questionnaire was used to gather data for this study. In general, web surveys have several advantages over traditional paper-based mail-in surveys: First, the sample is not restricted to a geographical location (hence, large samples are possible); Second, lower costs; and Third, faster responses. Such surveys are routinely employed by consulting firms for data collection purposes, by business firms for soliciting employee opinions on issues of corporate interest, and by news organizations (e.g. CNN, BBC) for conducting online polls. Because the object of this study is online auction users, the online approach is appropriate since online customer behavior is the focus of this study.

An online experiment was posted on the web site, and seven different feedback profiles were manipulated by varying the number of positive and negative ratings in a format similar to the online auction market Yahoo! Auction. Each participant was presented with a web page that described seven sellers' feedback profiles in different pages. The participants were asked to response how much they trusted each seller. The participant's assessment of

each seller's trustworthiness was based solely on his or her own judgment on the feedback profiles. The feedback profiles were controlled to reflect different levels of feedback ratings by varying the number of positive and negative ratings. However, we did not provide feedback comments within each profile, only numeric ratings.

In the study, the feedback profiles were operationalized based on Ba and Pavlou [2]. We use the same five feedback profiles ($S_{445,0}$, $S_{33,0}$, $S_{0,0}$, $S_{34,3}$, $S_{447,39}$, where S represents the seller and the first subscript refers to the number of positive ratings and the second refers to the number of negative ratings. $S_{0,0}$ is a control profile constructed with neither positive nor negative ratings.) and plus two more profiles ($S_{272,0}$, $S_{274,3}$) which is adjusted according to the online auction environment in Taiwan.

This study developed the questionnaire from existing measurement scales and related literatures. The original measurement scales were translated from English to Chinese, and verified the accuracy of translation by one MIS professor. Also, the experiment was pre-tested by 12 graduate students who had experience with online auction without any explanation from the author.

For the actual experiment, in order to conform with the purpose of this study, the object of sample should have experience with online auction. So, an invitation e-mail was sent to eBay and Yahoo! Auction users, and also posted on BBS forum. The invitation e-mail informed them of the purpose of the study, and they were assured of their anonymity. In order to motivate their response, we offered an incentive, 3500 NT Dollars gift coupons to be drawn among all participants who provide valid data. The data was collected from March 11th, 2005 to March 25th, 2005. There were totally 304 responses, and eventually remained 278 valid data.

Measurements

Scales to measure trust were based on credibility, and adopted from Ba and Pavlou [2]. Participants were requested to complete a three-item, nine-point Likert scales measuring trust in seller's credibility.

Scales to measure disposition to trust were adopted from Gefen [8] who used Amazon.com in a free-simulation experiment. Participants were requested to complete a five-item, seven-point Likert scales measuring disposition to trust.

Table 1. Measurement of Trust

Items	Scales	Sources
1. I think this seller is honest. 2. I believe this seller will deliver to me the product I purchase according to the posted delivery terms and conditions. 3. I believe this seller will deliver to me a product that matches the posted description.	Nine-point Likert scale	Ba and Pavlou (2002)

- Response scale: 1 = strongly disagree; 5 = neither agree nor disagree; 9 = strongly agree.
- The Cronbach's α in seven different scenarios range from 0.895 to 0.979.

Table 2. Measurement of Disposition to Trust

Items	Scales	Sources
1. I generally trust other people. 2. I tend to count upon other people. 3. I generally have faith in humanity. 4. I feel that people are generally reliable. 5. I generally trust other people unless they give me reason not to.	Seven-point Likert scale	Gefen (2000)

- Response scale: 1 = strongly disagree; 4 = neither agree nor disagree; 7 = strongly agree.
- Cronbach's $\alpha = 0.863$

4. Results

Hypothesis Testing

In order to examine the effect of online feedback mechanism on buyers' perception of trust in sellers, a multivariable regression analysis was performed. According to Ba and Pavlou's approach [2], we took trust as dependent variable, and the independent variables were the logarithm of the number of positive ratings and

negative ratings, adding 1 to avoid taking log of 0. The reason for taking logarithmic transformation was because we assumed that positive rating is a concave function. When a seller already has many positive ratings, the marginal benefit of adding one more positive rating should not be bigger than a seller who has few positive ratings. In the same argument, we assumed negative rating is a convex function.

Table 3 shows the coefficient table of the multivariable regression model. It shows a high R^2 (0.466)

Table 3. Coefficients of the Regression Model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.761	.080		59.862	.000
Log(PR)	1.122	.041	.490	27.302	.000
Log(NR)	-2.571	.066	-.700	-38.983	.000

- a. PR = Positive Ratings; NR = Negative Ratings; N = 1946
b. $R^2 = 0.466$, Adjusted $R^2 = 0.466$

Table 4. ANOVA Table of the Regression Model

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	3794.418	2	1897.209	849.224	.000 ^a
Residual	4340.760	1943	2.234		
Total	8135.178	1945			

- a. Predictors: (Constant), Log(NR), Log(PR)

In order to examine how feedback profile with no negative ratings affects buyers' trust perception in sellers, we used one-way ANOVA test to compare the four groups of profile with no negative ratings ($S_{445,0}$, $S_{272,0}$, $S_{33,0}$ and $S_{0,0}$, where S represents the seller and the first subscript refers to the number of positive ratings and the second refers to the number of negative ratings). The mean value of trust for the four groups is 7.60, 7.54, 7.00, and 4.59 respectively. Table 5 shows the result that there is a significant difference between the means of the four groups (F-value = 347.538, p-value < .000). Moreover, the means of the first three groups ($S_{445,0}$, $S_{272,0}$, and $S_{33,0}$) are a little bit close. We further performed a

and both positive ($b_1 = 0.490$) and negative ($b_2 = -0.700$) ratings determine the formation of a buyer's trust in sellers. And, table 4 also shows that Log (PR) and Log (NR) significantly influence buyers' perception of trust in sellers in the regression model, with the F-value = 849.224, p-value < .000. This supports the hypothesis 1 which argued that the feedback mechanism is related to buyers' trust in seller's credibility.

paired-samples t test to compare these three groups. The results shows that there is a significant difference between the means of $S_{272,0}$ and $S_{33,0}$, with $t = 9.797$, p-value < .000 (see Table 6). But, there is no significant difference between the means of $S_{445,0}$ and $S_{272,0}$ ($t = 1.600$). The reason is perhaps the marginal benefit of positive ratings as we assumed before. Seller's positive rating is high enough to have no contribution on buyer's perception of trust. Thus, all of the above approximately supports the hypothesis 2, which argued that with no negative rating, a great number of positive ratings induce stronger buyers' trust in seller's credibility, except for the marginal benefit of positive ratings.

Table 5. ANOVA Table of Four-groups of Profile

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	1678.230	3	559.410	347.538	.000
Within Groups	1783.479	1108	1.610		
Total	3461.709	1111			

Table 6. Paired Samples Test for Group Means

		Paired Differences			t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean			
Pair 1	Group1 - Group2	.067	.700	.042	1.600	277	.111
Pair 2	Group2 - Group3	.542	.922	.055	9.797	277	.000

a. Group1 = $S_{445,0}$; Group2 = $S_{272,0}$; Group3 = $S_{33,0}$

To examine negative ratings having greater opposing effect than positive ratings on buyer's perception of trust in sellers, we performed two simple regressions, which have only one independent variable. Log(PR) and Log(NR) are the independent variables in two separate regression model, and trust is the dependent variable. The results were shown in Table 7 and Table 8. From the two results, we know that negative rating ($R^2 = 0.261$) has

greater contribution than positive ratings ($R^2 = 0.049$) on buyer's perception of trust in sellers. And, there is an obvious difference in R^2 between positive and negative rating. Moreover, from Table 3, the coefficients of the regression model show that negative rating ($b_2 = -0.700$) has a negative effect on the dependent variable. This supports the hypothesis 3 which argued that negative ratings have greater opposing effect than positive ratings in inducing buyers' trust in seller's credibility.

Table 7. Results of Regression Analysis for Positive Rating

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.222 ^a	.049	.049	1.995

a. Predictors: (Constant), Log(PR)

Table 8. Results of Regression Analysis for Negative Rating

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.512 ^a	.262	.261	1.758

a. Predictors: (Constant), Log(NR)

To examine the moderating effect of disposition to trust on the relationship between feedback mechanism and buyer's trust in sellers, we first investigated the relationship between trust and disposition to trust, and a simple regression analysis was performed. The results were shown in Table 9. The correlation between trust and

disposition to trust is quite low, so we can ascertain that disposition to trust has little, even no direct influence on trust.

Table 9. Correlations for Trust and Disposition to Trust

		Y	Propensity
Pearson Correlation	Y	1.000	.121
	Propensity	.121	1.000
Sig. (1-tailed)	Y	.	.000
	Propensity	.000	.
N	Y	1946	1946
	Propensity	1946	1946

Further, we separated 278 respondents into three groups, low, medium, and high trust propensity. We also performed multivariable regression analysis same as previous testing. Among all respondents, 88 respondents belong to high trust propensity, 86 respondents belong to medium trust propensity, and 104 respondents belong to low trust propensity. The results were shown in Table 10, Table 11 and Table 12. They all have high explanatory ability ($R^2 = 0.465$, $R^2 = 0.484$ and 0.482) and the ANOVA test explained the model fit ($F\text{-value} = 266.035$, 281.305 and 336.962).

In normal circumstance, people with high trust propensity are easy to trust others, so positive rating should have little effect on them; because they themselves are already easy to trust others. On the contrary, negative

rating would have deeper effect on them, because they need evidences to tell them not to trust others so easily. Thus, from Table 10 and Table 12, using standardized coefficients to compare high with low trust propensity, we can know that PR in high trust propensity ($b_1 = 0.477$) is less effective than that in low trust propensity ($b_1 = 0.530$), and NR in high trust propensity ($b_2 = -0.703$) is more effective than that in low trust propensity ($b_2 = -0.696$). In the same argument, people with low trust propensity are not rash to trust others. They need evidences to convince them, so PR in low trust propensity ($b_1 = 0.530$) will have greater effect than PR in high trust propensity ($b_1 = 0.477$). All of the above supports the hypothesis 4, which argued that there is a moderating effect of disposition to trust on the relationship between feedback mechanism and trust in seller's credibility.

Table 10. Coefficients of the Regression Model for High Trust Propensity

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	5.141	.147		34.925	.000
Log(PR)	1.135	.076	.477	14.919	.000
Log(NR)	-2.682	.122	-.703	-21.970	.000

a. PR = Positive Ratings; NR = Negative Ratings; N = 616

b. $R^2 = 0.465$, Adjusted $R^2 = 0.463$

c. $F\text{-value} = 266.035$, $p\text{-value} < .000$

Table 11. Coefficients of the Regression Model for Medium Trust Propensity

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.932	.134		36.726	.000
Log(PR)	1.029	.069	.471	14.823	.000
Log(NR)	-2.538	.111	-.724	-22.787	.000

a. PR = Positive Ratings; NR = Negative Ratings; N = 602

b. $R^2 = 0.484$, Adjusted $R^2 = 0.483$

c. $F\text{-value} = 281.305$, $p\text{-value} < .000$

Table 12. Coefficients of the Regression Model for Low Trust Propensity

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	4.296	.126		34.185	.000
Log(PR)	1.189	.065	.530	18.295	.000
Log(NR)	-2.504	.104	-.696	-24.027	.000

a. PR = Positive Ratings; NR = Negative Ratings; N = 728

b. $R^2 = 0.482$, Adjusted $R^2 = 0.480$

c. $F\text{-value} = 336.962$, $p\text{-value} < .000$

In summary, the study, from buyer's perspective, aims to examine how the feedback profile affects the buyers' perception of trust in sellers, and discovers the moderating effect of disposition to trust on the process of trust formation. The results showed that hypothesis 1, 3, and 4 are supported, and hypothesis 2 is partially supported. In the next section, we will discuss and conclude the study.

5. Discussion and Conclusions

This study investigates the moderating effect of disposition to trust on the process of trust formation and the effect of online feedback mechanism in inducing buyers' trust in sellers' credibility. Data collection was performed via online survey, and most respondents were aggregated in 19 to 25 years old. There perhaps exists a bias among the data. But, according to the research of insightxplorer.com in 2004, the main group of Internet shopping in Taiwan was aggregated in 20 to 29 years old. So, the bias may not arise from the defects on data collection.

The primary contribution of this research is that we empirically validated the moderating effect of disposition to trust for specific online service, and also. The results in section 4 largely support the hypotheses. So, disposition to trust do affect the trust formation induced by specific online service, and the online feedback mechanism really plays an important role in buyers' perception of trust in sellers, and further induces buyers' intention to transact. Another contribution of this research is that we ascertained the effectiveness of the feedback mechanism in inducing buyers' trust in sellers in Taiwan auction markets. Besides above contributions, there is still one interesting finding. When testing hypothesis 2, we indirectly discover the marginal benefit of positive ratings, which verify the assumption of positive rating being a concave function.

Although the data support the proposed hypotheses, the study still has some limitations. One main limitation of this study is that we manipulated the feedback profiles by varying the number of positive and negative ratings without taking feedback comment into consideration. As our empirical observations, many buyers have the habits in reviewing not only sellers' feedback ratings but also feedback comments. Much information about sellers can obtain from feedback comments. For example, a seller may get one negative rating simply due to a delay in delivering goods, while others may be due to opportunistic behaviors, such as misrepresenting product information or cheating buyers into paying first without delivering products. Therefore, feedback comments would be another important issue beyond our research.

Too many factors were not taken into this research model at the same time, and this research could only

focus on specific scope. There are several directions to strengthen the results of this study. First, past experience may be another one moderating factor that could affect buyers' trust formation. Past experience reflects the quality of a buyer's own encounters with particular sellers in a specific marketplace (Pavlou and Gefen, 2004). Customer experience in online environment is important in determining their behavior on a web site (Novak, Hoffman and Yung, 2000). Second, in order to repair the defect of this research, feedback comment could be another direction. But, it is difficult to take feedback comment into consideration; it may need a longitudinal research to further enhance our empirical research.

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