

# “Does your backyard nurture loyal customers?”: The role of personal reciprocity in the relationship between satisfaction with an e-retailer sponsored virtual community and customer loyalty

Qingqing Bi

*Information Systems, City University of Hong Kong, Kowloon, Hong Kong, bqingqing@gmail.com*

Doug Vogel

*Information Systems, City University of Hong Kong, Kowloon, Hong Kong, isdoug@cityu.edu.hk*

Follow this and additional works at: <http://aisel.aisnet.org/amcis2012>

---

## Recommended Citation

Bi, Qingqing and Vogel, Doug, ““Does your backyard nurture loyal customers?”: The role of personal reciprocity in the relationship between satisfaction with an e-retailer sponsored virtual community and customer loyalty” (2012). *AMCIS 2012 Proceedings*. 13. <http://aisel.aisnet.org/amcis2012/proceedings/SocialIssues/13>

This material is brought to you by the Americas Conference on Information Systems (AMCIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2012 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# “Does your *backyard* nurture loyal customers?”

## The role of personal reciprocity in the relationship between satisfaction with an e-retailer sponsored virtual community and customer loyalty

**BI Qingqing**

Department of Information Systems,  
City University of Hong Kong  
bqingqing@gmail.com

**Douglas R. Vogel**

Department of Information Systems,  
City University of Hong Kong  
isdoug@cityu.edu.hk

### ABSTRACT

An e-retailer sponsored virtual community (ESVC), as the *backyard* of an e-commerce website, provides consumers with an online platform to *play* with each other. It also facilitates consumer-to-e-retailer communications. How to drive value from consumer participation in ESVC becomes important in this context. In this research, the role of personal reciprocity as the mediator between a consumer’s satisfaction with ESVC and consumer loyalty toward e-retailers was investigated. Questionnaires were distributed through an online survey. A pilot analysis was performed based on limited data collection. Results, limitations and future directions are discussed.

### Keywords

Ecommerce, virtual community, customer interaction, satisfaction reciprocity, loyalty.

### INTRODUCTION

Virtual communities have been prevalent for many years. As the online information sharing and socializing platforms for customers, virtual communities also provide a channel for e-retailers to generate business value. More and more e-retailers start to build online virtual communities, which have been named as e-retailer sponsored virtual communities (ESVC) or vendor-sponsored virtual communities (VSVC) (Sumeet, Kim and Zheng, 2006). As a useful channel of relationship management (RM), ESVC provides a platform for e-retailers to easily distribute product information, help customers in troubleshooting, and deal with customer complaints in a timely fashion. They intend to utilize this *backyard* to *nurture* customer loyalty, as loyal customers would be less likely to switch to competitors, more likely to spread positive word-of-mouth information, and exhibit lower sensitivity to price and higher endurance to customer-service mishaps (Anderson and Mittal, 2000). On the other hand, consumers would like to participate in an ESVC as they can contact e-retailers directly, share product experience with other consumers, and connect with people to establish friendship. However, a consumer’s satisfaction with an ESVC may not necessarily lead to loyalty with corresponding e-retailer as the switching costs in the online shopping environment are relatively low. Whether this *backyard* strategy can work out still needs exploration.

Antecedents of customer loyalty, such as satisfaction, trust, and commitment, have been studied extensively. However, the meta-analysis performed by Palmatier, Dant, Grewal and Evans (2006) showed RM?? investments have a direct effect on seller objective performance outcomes, and this is greater than the effect mediated by trust and commitment. Palmatier, Dant, and Grewal (2007) suggested other possible mediating mechanisms such as reciprocity, exchange effectiveness and gratitude should also be investigated by researchers.

Thus within this specific context, the mediating role of reciprocity in the relationship between customers’ satisfaction with ESVC and customer loyalty to e-retailers was investigated. It is not only a research trying to fill the above literature gap, but also an empirical study which generates beneficial results for practitioners. In the following sections, the literature on how online community building influences customer loyalty will be firstly reviewed. After introducing the theoretical foundation and research hypotheses, research method and data analysis procedures will be explained. Due to space limitations, insufficient data has been collected, so only a pilot analysis can be performed. The results of this analysis will be reported in the discussion. Limitations and future directions will be addressed in the conclusion.

## LITERATURE AND THEORETICAL FOUNDATIONS

### *ESVC and Customer loyalty toward e-retailer*

ESVC is an online social entity, in which existing and potential customers communicate with each other, share information and opinions regarding offered products and services. It facilitates word-of-mouth among customers, which in turn increases their loyalty (Srinivasan, Anderson and Ponnavaolu, 2002). If consumers value social relationships established in ESVC, they may be loyal to the corresponding e-retailer because they believe the e-retailer's way of doing business aligns with their own values. Sumeet et al. (2006) empirically investigated the influence of community commitment on customer loyalty and found a positive result. However, a customer's attachment to an online community will directly influence intentions to participate continuously in the community, yet not necessarily lead to loyalty to the corresponding e-retailer and repeat purchasing behavior. How an online community building increases customer loyalty still needs better explanation and more empirical evidence. Moreover, previous studies were undertaken from the e-retailer's perspective to discuss potential mechanisms of utilizing online community building to increase customer loyalty. McMullan and Gilmore (2008) pointed out that customers do not perceive loyalty development as a passive one-way relationship, but an active two-way opportunity. Thus from the customers' perspective to investigate their loyalty to online vendors is necessary.

Customer loyalty has been defined and measured from both behavioral and attitudinal perspectives in marketing research. From the behavioral perspective, customer loyalty is defined as repeat patronage (Oliver and Rust, 1997); while from the attitudinal perspective, it is defined as a feeling of attachment to a set of brands and companies (Czepiel and Gilmore, 1987; Kotler, Armstrong and Frank, 1989). Companies have found that those consumers who are strongly loyal will help firms gain competitive advantages in marketing, such as reduced marketing and transactional costs, increased cross-selling rate, a positive word-of-mouth effect, and reduced cost of failure. In this research, consistent with previous definitions, customer loyalty is assessed through the attitudinal dimension in addition to the behavioral dimension. A customer's loyalty to an e-retailer is defined as a favorable attitude to the online vendor, resulting in repeat purchasing behavior.

### *Personal reciprocity*

Personal reciprocity has been defined as an internalized social norm (Perugini, Gallucci, Presaghi and Ercolani, 2003). It is rooted in social exchange theory. According to Emerson, (1976), social exchange includes a series of interactions between specific actors and can generate obligations, where reciprocity is the basic norm of exchanges. People often adjust behaviors performed for others according to what they receive from others in an exchange relationship. An individual who holds personal reciprocity is likely to conform to gift-giving behaviors based on his/her internalized values which are strengthened through anticipation of self-punishments and self-rewards. In this research, we only focus on positive personal reciprocity, which is defined as an ESVC member's conscious tendency to engage in a reciprocal and mutually beneficial relationship with an e-retailer (Wu, Chan and Lau, 2008).

Reciprocity is important in consumer-company relationships (Bagozzi, 1995; Fournier, 1998). Morais, Dorsch and Backman (2004) stated that reciprocity was a key construct in the customer-loyalty framework. Morales (2005) also proposed the important role of personal reciprocity as customer's reward to firms for effort directed towards them individually. In the RM literature, affective commitment, which can be created through reciprocity, has been demonstrated as one of the drivers of consumer loyalty (Gustafsson, Johnson and Roos, 2005b). Palmatier, Jarvis, Bechkoff and Kardes (2009) empirically tested the mediating role of gratitude-based reciprocal behaviors in the relationship between RM investment and seller performance outcomes, such as customer purchase intention and sales of growth.

In ESVC, customers directly interact with each other and indirectly interact with e-retailers. E-retailers devote money, labor, and resources to manage ESVCs, and users receive intangible services without any pay. According to norm of reciprocity, if users are satisfied with the community, they may perceive a sense of indebtedness toward e-retailers for their free services. This indebtedness may inspire their personal reciprocity, and in turn, lead to affective loyalty. Thus the first hypothesis is:

*H1: Personal reciprocity to e-retailer will positively influence customer loyalty to e-retailer.*

### *Satisfaction with ESVC*

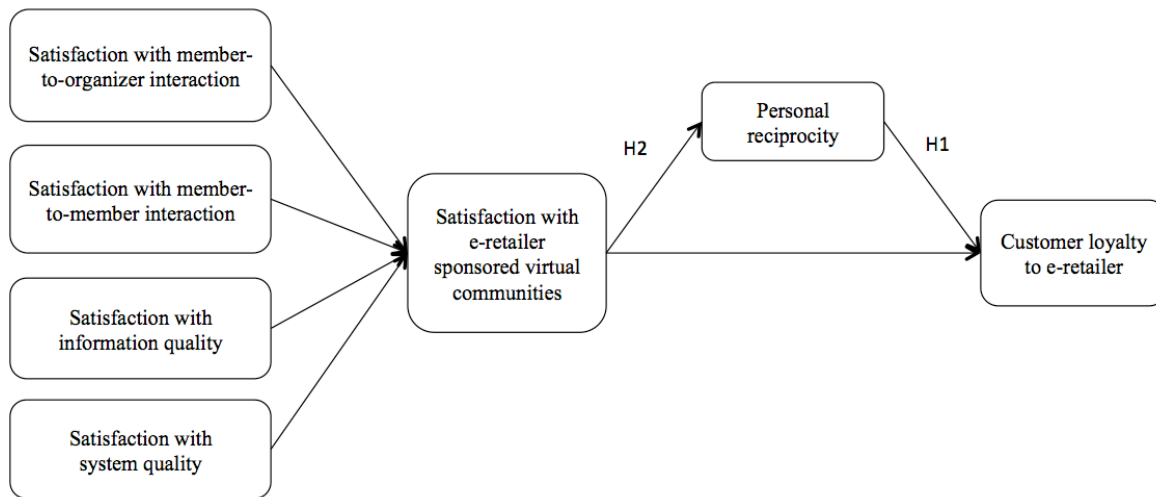
Users' satisfaction with online community refers to one's evaluation of the pleasurable level of the community's performance based on their personal experience (Gustafsson, Johnson and Roos, 2005). It refers to the cumulative satisfaction across the interaction process, which has been demonstrated to influence one's attitude and attachment toward an e-retailer. According to Valck, Langerak, Verhoef and Verlegh (2007), users' satisfaction with ESVC (S-ESVC) is considered as a four-dimensional construct: satisfaction with member-to-organizer interaction (SMOI), satisfaction with member-to-member interaction (SMMI), satisfaction with information quality (SIQ), and satisfaction with system quality (SSQ). The first two factors focus on human issues, and the latter two focus on community site qualities. Member-to-organizer interaction is the

engagement between consumers and managers of ESVC, who can help consumers with complaints on products and their online services will directly influence customer satisfaction with ESVC. Member-to-member interactions are usually through information and social exchanges. According to social capital theory (Burt, 1992; Coleman, 1988), through the socialization activities in ESVC, consumers gain social support from online friends and expand their social network. SMMI reflects customers’ satisfaction of social needs fulfillment when they participate in online communities. Information quality (IQ) and system quality (SQ) have been taken as two important aspects of information systems. Previous studies stated that IQ and SQ are two determinant indicators of user satisfaction toward online communities (Kettinger, Park and Smith, 2009). Thus in this research, satisfaction with ESVC will be measured using the above four dimensions and manipulated as a formative construct when testing structural model.

Carr (2006) empirically tested the influence of users’ evaluation of IS service quality on their reciprocal behaviors. Though he did not directly assess the influence of users’ satisfaction on personal reciprocity, the results indirectly provided evidence of the positive influence in this relationship. As previously stated, affective commitment can be created through personal reciprocity, and satisfaction has been demonstrated as one of its positive antecedents (Gustafsson et al., 2005a). In addition, given the definition of personal reciprocity, people often adjust behaviors performed for others according to what they receive from others in an exchange relationship. If users are satisfied with the community quality, they may have more positive reciprocal propensity than unsatisfied users. Thus the second hypothesis is:

*H2: Users’ satisfaction with e-retailer sponsored virtual community will positively influence their personal reciprocity to e-retailer.*

As the relationship between satisfaction and loyalty has already been well studied, in this study only the relationships between satisfaction and personal reciprocity, and personal reciprocity and customer loyalty to e-retailers, and mediation analysis will be tested. Thus the research model is shown as Figure 1.



**Figure 1. Research model**

**METHOD**

*Data collection*

In this study, online survey was adopted to collect data. Questionnaires were distributed through invitation letters to customers of online e-market, who are also users of the corresponding virtual community. In this pilot study, users of Chinese online business-to-customer (B2C) platforms (Tmall, Vancl, and Redbaby) were chosen. They all have built online communities, and have large active user base. The online questionnaire was distributed and until now, 95 valid data have been collected. The sample demographics are shown in Table 1.

Gender	Female: 77 (81.05%)	Male: 18 (18.95%)
Average ESVC participation year	3.5 years	
ESVC visiting frequency	Multiply times a day: 23 (24.21%)	Averagely once a day: 36 (37.89%)
	Averagely once a week: 26 (27.34%)	Averagely once a month: 9 (9.47%)

**Table 1. Sample demographics**

**Measures**

All of the constructs were measured using multiple items, which were formed in five-point Likert scales (ranging from 1 = strongly disagree to 5 = strongly agree). Most of the measurement items in questionnaire were adopted from previously validated scales. Some of the items were used exactly as given, while some were adapted with slight modifications to better fit the context of this study.

The independent S-ESVC was identified as a formative construct with four dimensional construct: SMMOI, SMMI, SIQ, and SSQ. SMMI and SMOI were measured by the purified items from (Valck et al., 2007), the measurement of SIQ was adopted from (Au, Ngai and Cheng, 2008; DeLone and McLean, 1992) and the measurement of SSQ was adopted from (Pearson, 1983). For the construct, personal reciprocity (PR), the measurement items were developed based on the definition and outline of (Perugini et al., 2003). The measurement of dependent variable, customer loyalty to e-retailer (LR), were adopted from (Sumeet et al., 2006). The survey instrument and a corresponding list of sources for scale items are presented in Appendix A.

In order to ensure face validity of the scales adopted, adapted, and developed, card sorting was used. Six judges were asked to sort the 44 items into 11 construct categories. The judges were all doctoral students from information systems domain. All of the measurement items were shuffled in an excel file with a standard set of instructions which contained detailed definitions and descriptions of the constructs. After the card sorting, Cohen’s Kappa (Cohen, 1960) scores were calculated to test the inter-rater reliabilities and the result is over 0.65 (Moore and Benbasat, 1991).

**DATA ANALYSIS**

The research model was analyzed using partial least squares (PLS) with the bootstrap re-sampling procedure. It allows the testing of the measurement model and structural model at the same time. Moreover, users’ satisfaction with online community is a second-order construct, and PLS supports the testing of hierarchical component model (Lohmoller, 1989; Wold, 1982). In this research model, satisfaction with ESVC, taken as a second-order construct, was measured by formative items of SMOI, SMMI, SIQ, SSQ. All the other constructs were measured by reflective items. We followed the instructions of (Diamantopoulos, Riefler and Roth, 2008; Polites, Roberts and Thatcher, 2011) to perform the analysis by using SmartPLS 2.0.

Thus we tested the structural relationships after assessing the measurement model.

**Measurement model**

- Reliability

Reliability concerns the extent to which the results of the measurement items are stable (individual item reliability) and consistent (internal consistency). To test the internal consistency of the measures, composite reliability (CR) values and average variance extracted (AVE) were examined. In this study, all of the CRs are more than 0.76 and all the AVEs of other constructs are higher than 0.5, which indicates good internal consistency of the constructs (see Table 2).

	Loyalty to e-retailer (LR)	Reciprocity to e-retailer (RR)	Satisfaction with community member-to-member interaction (SMMI)	Satisfaction with community member-to-organizer interaction (SMOI)	Satisfaction with information quality in community (SIQ)	Satisfaction with system quality (SSQ)
CR	0.9591	0.966	0.9233	0.9162	0.84338	0.7645
AVE	0.7706	0.8505	0.7512	0.7848	0.6264	0.5276

**Table 2 Reliability test results: CR and AVE**

- Construct validity

Construct validity indicates the extent to which the items measure the underlying constructs. It is examined by convergent and discriminant validity. Convergent validity measures to which degree the theoretically related items are related in reality. Discriminant validity measures to which extent the measures of different constructs are different from each other. In this study, other than SMMI and SMMOI, all the other constructs have good convergent and discriminant validity (see Table 3), and the square root of AVE of each construct is higher than the correlations between the constructs and others (see Table 4). Thus the measures of each construct have good convergent and discriminant validity.

	Customer loyalty to e-retailer (LR)	Personal reciprocity (PR)	Satisfaction with information quality in community (SIQ)	Satisfaction with community member-to-member interaction (SMMI)	Satisfaction with community member-to-organizer interaction (SMOI)	Satisfaction with system quality (SSQ)
LR_1	<b>0.907</b>	0.5556	0.2129	0.5799	0.597	0.3145
LR_2	<b>0.9277</b>	0.5427	0.1759	0.5438	0.546	0.2665
LR_3	<b>0.9276</b>	0.5778	0.3227	0.6005	0.5546	0.3089
LR_4	<b>0.8696</b>	0.4332	0.1153	0.5201	0.4951	0.1723
LR_5	<b>0.8625</b>	0.4844	0.1859	0.5001	0.4856	0.2374
LR_6	<b>0.8178</b>	0.592	0.2208	0.5001	0.5592	0.3882
LR_7	<b>0.8255</b>	0.5468	0.2726	0.4728	0.4228	0.2116
PR_1	0.5181	<b>0.9057</b>	0.2686	0.4601	0.4244	0.21
PR_2	0.5678	<b>0.9201</b>	0.252	0.4548	0.4746	0.2732
PR_3	0.5738	<b>0.9211</b>	0.318	0.5076	0.4767	0.3072
PR_4	0.5684	<b>0.9228</b>	0.3025	0.4622	0.4853	0.3952
SIQ_1	0.2069	0.2466	<b>0.7908</b>	0.2566	0.2253	0.2938
SIQ_2	0.2342	0.2314	<b>0.7404</b>	0.1934	0.1588	0.3291
SIQ_3	0.1815	0.2372	<b>0.84</b>	0.2801	0.393	0.4417
SMMI_1	0.5219	0.4249	0.334	<b>0.9068</b>	0.7179	0.244
SMMI_2	0.4135	0.3812	0.2793	<b>0.8974</b>	0.6437	0.234
SMMI_3	0.545	0.4014	0.1268	<b>0.783</b>	0.5027	0.2604
SMMI_4	0.6238	0.5626	0.3358	<b>0.8739</b>	0.7369	0.2639
SMOI_1	0.5716	0.5382	0.347	0.7687	<b>0.8891</b>	0.3052
SMOI_2	0.5482	0.412	0.2913	0.6799	<b>0.9119</b>	0.2824
SMOI_3	0.4683	0.4112	0.3249	0.5482	<b>0.8558</b>	0.3099
SSQ_1	0.2322	0.1474	0.1081	0.0463	0.1194	<b>0.5505</b>
SSQ_2	0.3013	0.2597	0.3953	0.233	0.324	<b>0.8633</b>
SSQ_3	0.1492	0.2954	0.4541	0.3132	0.246	<b>0.7311</b>

Table 3 Cross loadings of measurement items

	LR	PR	SIQ	SMMI	SMOI	SSQ
LR	<b>0.7706</b>	0	0	0	0	0

PR	0.6135	<b>0.8505</b>	0	0	0	0
SIQ	0.2507	0.2971	<b>0.6264</b>	0	0	0
SMMI	0.6075	0.5133	0.315	<b>0.7512</b>	0	0
SMOI	0.5994	0.5132	0.3619	0.7499	<b>0.7848</b>	0
SSQ	0.3156	0.3277	0.4658	0.2888	0.3369	0.5276

Table 4 Correlations of constructs

Structural model

Structural model validity is assessed by examining structural paths and  $R^2$  values. Bootstrap resampling was performed to test statistical significance of each path coefficient using  $t$ -test (Chin, 2010). Results from PLS have been illustrated in Figure 2, including path coefficients, significant levels, and explained variances.

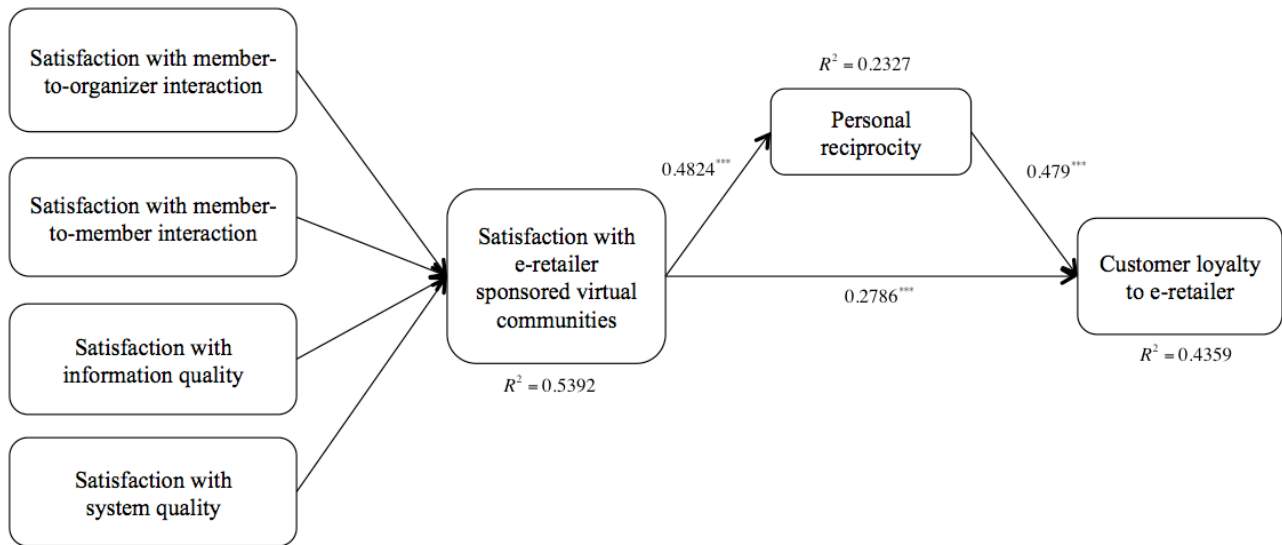


Figure 2. PLS Structural model (\*\*\*) $p < 0.001$

The results of structural model testing indicate that all of the hypotheses proposed are supported by empirical data. Users’ satisfaction with ESVC significantly influences their reciprocity toward e-retailer with path coefficients at 0.4824. The reciprocity to e-retailer has significant influence on consumers’ loyalty to e-retailer with path coefficients of 0.479.

The  $R^2$  values indicate to which extent the exogenous variables in the structural model explain the variances of endogenous variable. For the dependent variable, loyalty to e-retailer, there are 43.59 percent variance can be explained by the independent variables, reciprocity to e-retailer and satisfaction with ESVC. Reciprocity to e-retailer accounts for 23.27 percent variance in users’ satisfaction with ESVC.

Mediation analysis

In order to test the mediation effect of personal reciprocity in the relationship between satisfaction with ESVC and customer loyalty to e-retailers, the product of coefficients strategy was adopted (Preacher, 2004; Preacher and Hayes, 2008; Sobel, 1982). Product of coefficients strategy is used rather than Baron-Kenny causal step approach (Baron and Kenny, 1986) because Baron-Kenny approach (Baron and Kenny, 1986) does not estimate the indirect effect and does not consider error term for this effect which might permit direct investigation of statistical significance (Preacher and Hayes, 2008). Thus the mediation analysis was performed by using the SPSS macro created by (Preacher, 2004) after obtaining the latent variable scores in PLS analysis.

As shown in Table 5, personal reciprocity mediated the relationship between consumer satisfaction with ESVC and consumer loyalty to e-retailers. The indirect effect value is 0.3010, and Sobel  $z = 3.7488$  with  $p < 0.001$ , 95% CI is 0.1436-0.4584.

Path	Indirect effect	S.E.	Sobel z	LL 95 CI	UL 95 CI
------	-----------------	------	---------	----------	----------

S-ESVC->PR->LR	0.3010	0.0803	3.7488***	0.1436	0.4584
----------------	--------	--------	-----------	--------	--------

Note: Values are calculated through a bootstrapping routine with 95 cases and 5000 resamples.

\*\*\*  $p < 0.001$

**Table 5 Bootstrap results for indirect effects**

**DISCUSSION AND CONCLUSION**

Online community has been taken as relationship management investment by e-retailers. They intend to increase customer stickiness and increase customer loyalty. The e-retailer sponsored virtual community plays an important role in customer relationship management. Within this context, this research investigated how consumer’s satisfaction in e-retailer sponsored online community influences customer loyalty and the important factor, personal reciprocity. Specially, we were in line with the classification of satisfaction by Valck et.al. (2007), which clarified this construct and advanced our understanding of users interactions in online communities. Results show that personal reciprocity mediates customer satisfaction with ESVC and his/her loyalty toward corresponding e-retailer and significantly influence personal loyalty.

Though the data points were not enough, the pilot empirical results still provide us confidence in the mediating role that personal reciprocity plays. Limitation of this study also includes the inequivalent male and female responses. Though previous studies have stated slight gender difference in online community participation (Nonnecke, Andrews and Preece, 2006), between group analysis will be performed to check whether gender moderates the relationship.

In addition, this research collected data in Chinese context. As noted by Wu (2008), reciprocity is one of the important social norms rooted in Chinese culture values. In Chinese social life, people have high tendency to establish harmonious and mutually beneficial relationships, thus they try to build a positive cycle of favor exchanges through reciprocating behaviors. However, Gouldner (1960) stated reciprocity is a universal principle. Thus the role of reciprocity in other cultural ecommerce contexts should also be investigated.

**APPENDIX A**

Code	Measurement	Source
<b>Satisfaction</b>	<b>How satisfied are you with... ..</b>	(Valck et al., 2007)
<b>Member-to-member interaction</b>		
SMMI-1	... the interaction between you and other members of XYZ-VC within the community?	
SMMI-2	... the reaction that you get from other members about the things you do in XYZ-VC?	
SMMI-3	... contribution of other members to XYZ-VC?	
SMMI-4	... the friendships you have in XYZ-VC?	
<b>Member-to-organizer interaction</b>		
SMOI-1	... the personal interaction between XYZ-VC manager and yourself?	
SMOI-2	... the tuning of XYZ-VC to your individual desires?	
SMOI-3	... the reaction of XYZ-VC manager if you contact them?	
<b>Information quality</b>		(Au et al., 2008; DeLone and McLean,
SIQ-1	... the accuracy of information in XYZ-VC?	



SIQ-2	...the reliability of information in XYZ-VC?	1992 )
SIQ-3	...the updatedness of information in XYZ-VC?	
<b>System quality</b>		
SSQ-1	...the response time of XYZ-VC?	(Au et al., 2008 )
SSQ-3	...the functionality of XYZ-VC?	
SSQ-4	...the user friendliness of XYZ-VC?	
<b>Customer loyalty to e-retailer</b>		
LR-1	I would say positive things about XYZ to others.	(Sumeet et al., 2006)
LR-2	I would recommend XYZ to others.	
LR-3	I would encourage others to use XYZ.	
LR-4	I would consider XYZ as first choice for the needs of any information or products related to baby-care and home furnishing products.	
LR-5	As long as the present service continues, I doubt that I would switch to other retailers.	(Srinivasan et al., 2002)
LR-6	To me XYZ is the best retailer to do business with.	
LR-7	I try to use XYZ website whenever I need to make a purchase products related to baby care and home furnishing products.	
<b>Personal reciprocity to e-retailer</b>		Self-developed based on the definition and outline of (Perugini et al., 2003)
PR-1	Given that XYZ devotes money to establish and manage XYZ, I feel committed to repay it.	
PR-2	Given that XYZ employs staff to manage XYZ, I feel committed to repay it.	
PR-3	Given that I receive sound service provided by XYZ, I feel committed to repay it.	
PR-4	Given that XYZ runs well by the good management of the provider, I feel committed to repay it.	

**REFERENCES**

1. Anderson, E. W., and Mittal, V. 2000. Strengthening the satisfaction-profit chain. *Journal of Service Research*, 3: 107-120.
2. Au, N., Ngai, E. W. T., and Cheng, T. C. E. 2008. Extending the understanding of end user information systems satisfaction formation: an equitable needs fulfillment model approach. *Management Information Systems Quarterly*, 32(1): 43-66.
3. Bagozzi, R. P. 1995. Reflections on relationship marketing in consumer markets. *Journal of the Academy of Marketing Science*, 23(4): 272-277.
4. Baron, R. M., and Kenny, D. A. 1986. The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6): 1173-1182.
5. Burt, R. S. 1992. *The social structure of competition*. Cambridge: Harvard University Press.
6. Carr, C. L. 2006. Reciprocity: the golden rule of IS-user service relationship quality and cooperation. *Communications of the ACM*, 49(6): 77-83.

7. Chin, W. W. 2010. How to write up and report PLS analysis. In V. V. Esposito and e. al. (Eds.), *Handbook of Partial Least Squares*: 655-690. Berlin Heidelberg: Springer Handbooks.
8. Cohen, J. A. 1960. A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, 20: 37-46.
9. Coleman, J. S. 1988. Social capital in the creation of human capital. *American Journal of Sociology*, 94(1): 95-120.
10. Czepiel, J. A., and Gilmore, R. 1987. Exploring the concept of loyalty in services. In J. A. Czepiel, C. A. Congram and J. Shanahan (Eds.), *The services challenge: integrating for competitive advantage*: 91-94. Chicago: American Marketing Association.
11. DeLone, W. H., and McLean, E. R. 1992. Information system success: the quest for the dependent variable. *Information System Research*, 3(1): 60-95.
12. Diamantopoulos, A., Riefler, P., and Roth, K. P. 2008. Advancing formative measurement models. *Journal of Business Research*, 61: 1203-1218.
13. Emerson, R. M. 1976. Social exchange theory. *Annual Review of Sociology*, 2: 335-362.
14. Fournier, S. 1998. Consumers and their brands: developing relationship theory in consumer research. *Journal of Consumer Research*, 24(4): 343-373.
15. Gefen, D. 2002. Customer loyalty in e-commerce. *Journal of Association for Information Systems*, 3: 27-51.
16. Gustafsson, A., Johnson, M. D., and Roos, I. 2005. The effects of customer satisfaction, relationship commitment dimensions, and triggers on customer retention. *Journal of Marketing*, 69: 210-218.
17. Kettinger, W. J., Park, S. H. S., and Smith, J. 2009. Understanding the consequences of information systems service quality on IS service reuse. *Information and Management*, 46(6): 335-341.
18. Kotler, P., Armstrong, G., and Frank, G. 1989. *Principles of marketing*: NJ: Prentice Hall.
19. Lohmoller, J. B. 1989. *Latent variable path modeling with partial least squares*. Heidelberg: Physica-Verlag.
20. McMullan, R., and Gilmore, A. 2008. Customer loyalty: an empirical study. *eUropean Journal of Marketing*, 42(9): 1084-1094.
21. Moore, G. C., and Benbasat, I. 1991. Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research*, 2(3): 192-222.
22. Morais, D. B., Dorsch, M. J., and Backman, S. J. 2004. Can tourism providers buy their customers' loyalty? Examining the influence of customer-provider investments on loyalty. *Journal of Travel Research*, 42(3): 235-243.
23. Morales, A. C. 2005. Giving firms an "E" for effort: consumer responses to high-effort firms. *Journal of Consumer Research*, 31(4): 806-812.
24. Nonnecke, B., Andrews, D., and Preece, J. 2006. Non-public and public online community participation: needs, attitudes and behavior. *Electronic Commerce Research*, 6(1): 7-20.
25. Oliver, R. L., and Rust, R. 1997. Customer delight: foundations, findings, and managerial insight. *Journal of Retailing*, 73(3): 311-337.
26. Palmatier, R. W., Dant, R. P., Grewal, D., and Evans, K. R. 2006. Factors influencing the effectiveness of relationship marketing: a meta-analysis. *Journal of Marketing*, 70(4): 136-153.
27. Palmatier, R. W., Dant, R. P., and Grewal, D. 2007. A comparative longitudinal analysis of theoretical perspectives of interorganizational relationship performance. *Journal of Marketing*, 71(October): 172-194.
28. Palmatier, R. W., Jarvis, C. B., Bechhoff, J. R., and Kardes, F. R. 2009. The role of customer gratitude in relationship marketing. *Journal of Marketing*, 73: 1-18.
29. Perugini, M., Gallucci, M., Presaghi, F., and Ercolani, A. P. 2003. The personal norm of reciprocity. *European Journal of Personality*, 17: 251-283.
30. Polites, G. L., Roberts, N., and Thatcher, J. 2011. Conceptualizing models using multidimensional constructs: a review and guidelines for their use. *European Journal of Information Systems*: 1-27.
31. Preacher, K. J. 2004. SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavioral Research Methods, Instruments, and Computers*, 36(4): 717-731.
32. Preacher, K. J., and Hayes, A. F. 2008. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavioral Research Methods*, 40(3): 879-891.
33. Reichheld, F. F., and Schefter, P. 2000. E-loyalty: your secret weapon on the web. *Harvard Business Review*, 78: 105-113.
34. Sobel, M. E. 1982. Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, 13: 290-312.
35. Srinivasan, S. S., Anderson, R., and Ponnnavolu, K. 2002. Customer loyalty in e-commerce: an exploration of its antecedents and consequences. *Journal of Retailing*, 78: 41-50.
36. Sumeet, G., Kim, H.-W., and Zheng, R. J. 2006. Converting virtual community members into online purchase customers. *Pacific Asia Conference on Information Systems*.

37. Valck, K. d., Langerak, F., Verhoef, P. C., and Verlegh, P. W. J. 2007. Satisfaction with virtual communities of Interest: effect on members' visit frequency. *British Journal of Management*, 18: 241-256.
38. Wold, H. 1982. Soft modeling: the basic design and some extensions. In K. G. Joreskog and H. Wold (Eds.), *Systes under indirect observation: causality, structure, prediction (Volume 2)*: 1-54. North-Holland, Amsterdam.
39. Wu, W.-p., Chan, T. S., and Lau, H. H. 2008. Does consumers' personal reciprocity affect future purchase intentions? *Journal of Marketing Management*, 24(2): 345-360.