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Understanding relationship benefits from harmonious brand community on social media

Mingli Zhang and Nuan Luo

School of Economics and Management, Beihang University, Beijing, China

Abstract

Purpose – Brand communities have been labeled as a social aggregation of brand fans and businesses. Yet, limited research has examined customers' perceived relationship benefits in brand community on social media. Drawing from social capital theory and relationship benefits research, the purpose of this paper is to discover how online harmonious brand community influence customers' perceived relationship benefits (i.e. confidence, special treatment, social and honor).

Design/methodology/approach – Hypotheses are tested by applying a structural equation modeling and the data are collected from a survey of smartphone community members ($n = 543$) based on Sina Weibo.

Findings – The results suggest that harmonious brand communities strengthen customers' perceived relationship benefits on social media, which are the important factors to form community satisfaction and positive word-of-mouth of community. And community engagement amplifies the influence of harmonious brand communities and has a moderating effect on the role of harmonious community relationships in confidence benefits.

Originality/value – The present study extends prior research on relationship benefits from the perspective of brand community based on social media and reveals the role of harmonious community relationships in developing community satisfaction and positive word-of-mouth.

Keywords Social media, Social capital, Harmonious brand community, Relationship benefits

Paper type Research paper

1. Introduction

The concept of brand community originates in sociology (Muniz and O'Guinn, 2001). Such a brand community is jointly incorporated by socially networked groups of customers with shared interest in a brand, and this means a brand community is essentially based on a set of relationships that customer develops with the brand and other customers. These friendly customer-brand-customer triad relationships make brand community healthier and tighter (Luo *et al.*, 2015; Schau *et al.*, 2009). Therefore, the underlying mechanism for constructing a harmonious brand community can be manifested in the "solid community triangle," which consists of cordial customer-brand relationships and customer-other customers relationships (Muniz and O'Guinn, 2001).

In recent years, the emergence of social media has dramatically influenced marketing practices. An increasing amount of companies have started to build their own brand community based on social media to engage customers with the brand and with other customers (Okazaki *et al.*, 2015). Many businesses fail to use online brand community to accomplish marketing goals, mostly because they do not fully understand or are unable to effectively meet customer benefit needs in social media setting (Fournier and Lee, 2009). The combination of brand community and social media caters to customers' growing needs and provide customers with the important

platform to establish, and develop and maintain customers' social capital. In brand communities based on social media, members can easily communicate with each other, share meaningful consumption experiences and establish/develop a sense of belonging. As a result, social media have a new impact on the community's interactions and the interests members can obtain from community, which is different from in face-to-face service encounters (Kietzmann *et al.*, 2011).

For a long-term relationship, customers must perceive the relationship valuable enough to stay in it. Some core benefits, such as product, service quality and price, are obvious to customers. In addition, customers also expect to receive additional relationship benefits, including confidence, special treatment, social and honor benefits (Liao *et al.*, 2014; Chen and Hu, 2010). According to previous research, relationship benefits perceived by customers can boost customers' satisfaction and generate positive word-of-mouth, which are important for accomplishing marketing goal of brand communities (Lee *et al.*, 2014; Li *et al.*, 2012). However, most of the present research has mainly focussed on the relationship benefits based on customer-brand relationships in the traditional services, and neglected the promising prospect of relationship benefits derived from customer-other customers' relationships in social media context (Wu *et al.*, 2015; Kim *et al.*, 2011). Andersen (2005) in his study emphasized the importance of customer-to-customer relationships in online brand community and proposed that further research should analyze their potential benefits that members can gain.

To respond the calls, our study examines customers' perceived relationship benefits in the view of harmonious community on social media. To understand the issue further, we consider community engagement (CE) as moderating variable in the proposed model. As an indicator of members' intrinsic motivation to participate in community, CE captures the positive influence of identifying with brand community (Algesheimer *et al.*, 2005). When customers become engaged with brand community, they can perceive a higher level of relationship benefits from community (Kim *et al.*, 2010). Thus, we argue that CE may moderate the impact of harmonious brand community on the customers' perceived relationship benefits. By exploring the relationships among these constructs, this study provides businesses with brand community strategies to enhance customers' perceived relationship benefits and finally promotes the community satisfaction.

The remainder of this paper is organized as follows. First, an extensive literature review is conducted. Next, we develop a relationship-benefits-specific model, and test the model and hypotheses quantitatively by using structural equation modeling (SEM) with survey data from a brand community based on social media. Finally, we summarize conclusions, theoretical and practical implications, limitations and avenues for future research.

2. Theoretical background
2.1 Brand communities
Muniz and O'Guninn (1996, 2001) introduced the idea of brand community and defined it as "a specialized, non-geographically bound community, based on a structured set of social relationships among admires of a brand," which emphasized the brand-mediated relationships among customers. Based on this, Muniz and O'Guninn (2001) put forward the concept model of brand community triangle, and made a breakthrough opposite to the single dimension of traditional "customer-brand" relationship model and paid more attention to the relationships between "customer and customer."

Social media makes community members conveniently interact with each other through time and space, and intertwines the community elements as never before (Habibi *et al.*, 2014). A brand community established on social media essentially is a fabric of relationships in which the customers and brand are situated (McAlexander *et al.*, 2002). As backbones of brand community, good relationships between and among customers and brand are guarantees for a health and harmonious community (Luo *et al.*, 2015; Schau *et al.*, 2009; Schouten *et al.*, 2007). By integrating the above-mentioned research, we characterize harmonious brand community by two dimensions, namely, customer-brand relationships and customer-other customers relationships.

2.2 Relationship benefits
Grounded on previous work on benefits that accrue to customers in long-term relationships with companies, Gwinner *et al.* (1998) identified three categories of relationship benefits through empirical research: confidence benefits, special treatment benefits and social benefits, which had been widely adopted by the follow-up study on relationships benefits (Chen and Hu, 2010; Hennig-Thurau *et al.*, 2002). So far many researches have focussed on relationship benefits in the traditional service industry.

Given that security and privacy issues (Elovici *et al.*, 2005), trust has been a particular concern in brand community on social media. But the online platforms allow marketing managers the opportunity to provide customized service offerings to their customers (Steiner *et al.*, 2016), fitting particularly well with customers' special treatment benefits. Different from point-to-point communication mode in real life, social media narrows the geographical and temporal differences, and accelerates the frequency of interpersonal interaction (Algesheimer *et al.*, 2005), which have a positive impact on expanding customers' networks and promoting their friendship. And social media in a certain extent breaks through the boundaries of original power and class, driving customers to actively seek new social identity for their actors in virtual space (Graham and Greenhill, 2013).

It is essential, therefore, to reexamine whether relationship benefits remain relevant in online context. According to Su *et al.*'s (2009) study, this paper distills relationship relationships into four dimensions: confidence benefits, special treatment benefits, social benefits and honor benefits. Confidence benefits were described as build-up of trust and reduction of anxiety after the establishment of long-term cooperative relations with other elements in community. Special treatment benefits refer to economical discounts, faster service or individualized additional services customers might receive for the lasting partnerships forged with brand and other customers. Social benefits pertain to meeting customers' social needs, which are characterized by familiarity and friendships with other elements in community. And honor benefits in association with "dignity" or "prestige" are recognized as customers' feelings of recognition and pride.

2.3 Social capital
Defined as "the sum of actual and potential resources embedded within and derived from the network of relationships possessed by an individual or social unit" (Nahapiet and Ghoshal, 1998), social capital mainly refers to the value acquired form connections within and between social networks. With compared to other forms of capital, such as financial, physical and human capital, the biggest difference is that social capital is rooted in the structures of social networks and relationships among people (Antcliff *et al.*, 2007), while the former ones usually pay close attention to assets or personnel.

As a sociological concept, the term social capital was initially applied in community studies (Jacobs, 1961). Later, social media brought social context into brand community and magnified the effects of social capital in community. Chiu *et al.* (2006) found that social capital provided driving force for individual knowledge sharing behavior in online communities. Hsiao and Chiou (2012) pointed out perceived social values from online community position were regulated by social capital as contextual factors. And Lee *et al.* (2014) also proved that social capital was a facilitator of perceived value in social media settings. Consistent with existing social capital literature, our study proposes a model to understand customers' perceived relationship benefits from harmonious brand community established on social media. More details will be described in the following part.

3. Research model and hypotheses

Figure 1 displays our research model. Following our research objectives and in line with social capital theory, the two relationship variables (customer-brand relationships and customer-other customers relationship) are modeled as determinants of customers' perceived relationship benefits. Community satisfactory and positive word-of-mouth is selected as the outcome variables of relationship benefits. In the remainder of this section we will define the research constructs and elaborate upon their hypothesized relationships.

3.1 Effects of customer-brand and customer-other customers relationships on customers' perceived relationship benefits

There is an agreement among brand researchers that relationships in the brand communities influence members' perception of benefits (Schau *et al.*, 2009; McAlexander *et al.*, 2002; Muniz and O'Guinn, 2001); however, despite this and other qualitative evidences, it is still not clear how the process of increasing benefits from the relationships in brand community looks like.

Customers interact with brands in ways that parallel their social relationships (Aggarwal, 2004). Hence, the social mechanisms that govern interpersonal relationships might apply to customer-brand relationships (Fournier, 1998; Aggarwal, 2004).
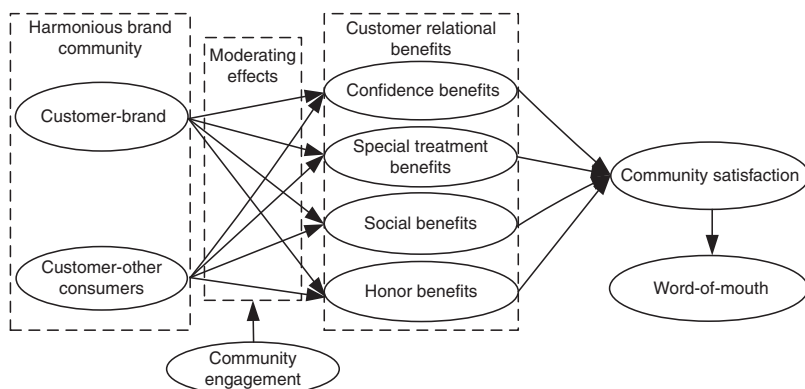

Figure 1.
Estimated model

Notes: Standardized coefficients are used, dashed arrows represent non-significant paths. ***$p < 0.001$; **$p < 0.01$; *$p < 0.05$, respectively

Social media platforms provide opportunities for businesses to communicate and contact with their customers, and allow customers to easily access to the various products information. In the long-term interaction, customers create affective and emotional bonds with their favorite brands. Such relationships can enhance customers' perceived benefits, including trust, perquisite, intimacy and status. Some existing researches have proved that customer can achieve benefits when they were actively involved in relationships with a brand (Fournier, 1998; Zhang *et al.*, 2014). However, most of extant studies were based on the customer-brand relationship quality.

In recent years, the infusion of social media gave impetus to the arrival of "customer empowerment" era, in which customer-to-customer communications or relationships attracted increasing interest from academics and markers. The product issues widely discussed among customers strengthen product and brand understanding or knowledge (Adjei *et al.*, 2010), which lowers their fear of uncertainty and prompts confidence on the product or service. Besides information sharing on products and personal experiences or comments, these members also usually actively offer assistance to other members on questions about products or individuals, which create opportunities for customers to establish or reinforce their expertise-based reputation (Grover, 2014; Nambisan and Baron, 2009). Social media provides a platform for customer-to-customer interactions, which offers customers with a service's contribution to establishing and/or reinforcing bonds between individuals, so as to satisfy their social needs for belonging and membership (Levy *et al.*, 2011). And through analyzing data collected from 293 restaurant customers, Kim *et al.* (2010) also found that rapport between community actors is a key determinate of extra attention or more preferential price. Based on the above analysis, this study proposes the following hypotheses:

H1. Customer-brand relationships positively influence perceived (a) confidence benefits, (b) special treatment benefits, (c) social benefits and (d) honor benefits of brand community members.

H2. Customer-other customers relationships positively influence perceived (a) confidence benefits, (b) special treatment benefits, (c) social benefits and (d) honor benefits of brand community members.

3.2 Effects of customers' perceived relationship benefits on community satisfaction
In new media era, with increasingly competitive markets, securing customer resources becomes the key to enterprise success. To maintain existing customers and develop new customers, marketers must form a deeper relationship with them and effectively meet their benefits, thus improving customer satisfaction and turning into business's preacher. Perceived relationship benefits is the foundation of relationship continuity and stability, which can enhance customers' satisfaction and drives relationship behavioral outcomes, such as positive of word-of-mouth (Lee *et al.*, 2014; Hennig-Thurau *et al.*, 2002). Positive links between the relationship benefits and customers' satisfaction have been reported in some studies. For instance, in Su *et al.* (2009) study, confidence benefits, special treatment benefits and honor benefits would positively influence satisfaction, repurchase intentions and positive word-of-mouth behavior in e-business environment. Lee *et al.* (2014) indicted further that psychological benefits, special treatment benefits and social benefits that customers felt were positively related with customers' satisfaction with employee and firm. Overall, if customers can perceive a higher level of relationship benefits

from their relationship with other members, their satisfaction level with the organization will increase. Thus, we proposed that:

H3. Customers' perceived (a) confidence, (b) special treatment, (c) social and (d) honor benefits positively correlate with community satisfaction.

3.3 Effects of community satisfaction on positive word-of-mouth

Aided by viral spread, many companies have organized word-of-mouth marketing activities on social media, so that customers will actively recommend products to someone. Because of the ability to predict customer behavior, customer satisfaction is considered to be a central element in the word-of-mouth marketing strategy. The more customers fulfill their satisfaction with the community, the higher the probability that customer will recommend the community to others. Some studies have been confirmed the positive bonds between satisfaction, relationship satisfaction in particular and (positive) word-of-mouth (Phillips *et al.*, 2013; Hennig-Thurau *et al.*, 2002). Thus, consistent with the results of prior research, the following hypotheses are proposed:

H4. Community satisfaction positively influences customer word-of-mouth communication.

3.4 Moderating effects of CE

Although harmonious community has an important influence on customers' perceived relationship benefits in brand community, its mechanism and effectiveness are complex. In this study, one community member characteristic, CE was considered. Engagement is receiving increasing attention in recent marketing literature, especially when advances in social media raise the need for the concept of engagement. Gummerus *et al.* (2012) portrayed customer engagement as a customers' total set of behavioral activities toward a firm, and related it to perceived relationship benefits. And Dessart *et al.* (2015) captured customers' engagement state in online brand communities from three dimensions, including cognition, affect and behaviors. Although marketing scholars offer interpretations on engagement from different angles, all the studies agree that engagement contributes to creating, building and enhancing customer relationships in complex, interactive and/or co-creative environment.

Taking into account the characteristics of brand community based on social media, this study draws on Algesheimer *et al.*'s (2005) research, and defines CE as "customer's intrinsic motivations to interact and cooperate with community members." High-engaged customers prefer participating in activities and communicating with other members, which will augment customers' perceived benefits from harmonious community relationships. And low-engaged customers mainly pay their attention to browse information, but very few actively interact or forward, so that their perceived relationship benefits is very limited. Thus we hypothesize that:

H5. CE amplifies the impacts of customers' relationships with the brand on (a) confidence benefits, (b) special treatment benefits, (c) social benefits and (d) honor benefits.

H6. CE amplifies the impacts of customers' relationships with the other customers on (a) confidence benefits, (b) special treatment benefits, (c) social benefits and (d) honor benefits.

4. Research methodology

4.1 Measurement instrument

Existing scales were adopted to measure the research constructs in the framework presented in Figure 1. Items measuring customer-brand and customer-other customers relationships came from McAlexander *et al.* (2002) and Habibi *et al.* (2014), and items addressing customers' perceived relationship benefits, including confidence benefits, special treatment benefits, social benefits and honor benefits, were from those used by Beatty *et al.* (1996), Gwinner *et al.* (1998), Hennig-Thurau *et al.* (2002) and Su *et al.* (2009). Additionally, items for measuring community satisfaction were adapted from Van Dolen *et al.* (2007), and items used to measure word-of-mouth of brand were developed based on the Kim *et al.* (2001) study. And the measures for CE came from Algesheimer *et al.* (2005).

To ensure instrument validity, in-depth interviews with six marketing experts and 60 experienced brand community members were conducted to assess the instrument in terms of logical consistency, ease of understanding, question sequence and context suitability. Pre-tests were then carried out and further refinement was made to tailor each questionnaire item for the study context. Because multi-item constructs measure each variable, those with factor loading values lower than 0.5 or item-to-total correlation score lower than 0.4 were eliminated. The Appendix presents the final items used in the study. All of the items were measured on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

4.2 Sample and data collection

The target population of this study is the community viewers of a China mobile phone brand based on Sina Weibo. As social media with a large number of active fans in China, Sina Weibo is a micro-blogging service and mainly serves as a conduit of sharing information and communicating with each other by broadcasting brief text. Given the popularity of the brand's smartphones in China, a brand community based on Sina Weibo frequently used by customers, was chosen as study platform to administer an online survey to community members. The brand community has around 0.31 million members, with sufficient amount of collective practices and member interactions for analysis. Measurement constructs were translated into Chinese by three bilingual subject matter experts. Data were collected mainly through an online questionnaire survey. Invitation letters with a questionnaire link were sent to potential participants, or left at offline members' homepages. To increase the response rate, we offered respondents who completed the questionnaire in full the opportunity to get product coupons. To avoid duplicate responses, respondent identity was confirmed by suing the e-mail and IP address obtained. After excluding incomplete and repeated answers, 543 valid responses were used for data analysis. Of these, 53.2 percent of respondents were female, and most of the respondents were 18-35 years old. Table I shows the detailed sample demographics.

5. Data analysis and results

The research model was analyzed using SEM, supported by linear structural relations (LISREL) 8.70. SEM is a powerful second generation multivariate technique used for analyzing causal models with an estimation of two components: measurement and structural models (Bollen, 1989). The measurement model is

Characteristics	Categories	Frequency	Ratio (%)
Gender	Male	254	46.78
	Female	289	53.22
Age (in years)	Below 18	2	0.37
	18-25	171	31.49
	26-35	249	45.86
	36-45	103	18.97
	Above 46	18	3.32
Education	Junior school and lower	5	0.92
	High school	22	4.05
	Bachelor	483	88.95
	Master's and higher	18	6.08
Employment industry	Enterprises	326	60.04
	Institution	92	16.94
	Civil servant	27	4.97
	Students	65	11.97
	Others	33	6.08
Total		543	100

Table I.
Sample
demographics

estimated using confirmatory factor analysis (CFA) to test whether the constructs possess sufficient reliability and validity. The structural model is used to examine the significance and direction of the relationship between the constructs.

5.1 Measurement model

For purifying and validating the measurements, this research conducted an exploratory factor analysis (EFA). The results showed that item loadings that exceeded 0.70 were significant for hypothesized constructs except one item of customer-brand relationships, one item of special treatment benefits and one item of community satisfaction, whose factor loading values lower than 0.5. The tests performed the questionnaire concerning composite reliability (CR) and average value extracted (AVE) to evaluate internal consistency of constructs. The CR and AVE values for all constructs in research model were higher than the recommended levels (Fornell and Larcker, 1981), indicating satisfactory internal consistency (see Table II).

To access measurement model, we performed a CFA with six constructs to judge model-fit. The results revealed that χ^2/df = 2.63, goodness-of-fit index (GFI) = 0.92, adjusted goodness-of-fit index (AGFI) = 0.88, normed fit index (NFI) = 0.97, comparative fit index (CFI) = 0.98, and the root mean square error of approximation (RMSEA) = 0.055. All of the model-fit indices met the requirements of recommended values (Bagozzi and Yi, 1988; Hayduck, 1987; Hair et al., 1998), thus exhibiting a good fit to the collected data. For satisfactory discriminant validity, the square root of each construct' AVE exceeded the correction between any pair of distinct constructs (Fornell and Larcker, 1981). The results provided support for the discriminant validity of measurement model (see Table III).

5.2 Structural model and hypothesis testing

5.2.1 Tests of main effects. H1-H6 were tested with SEM with LISREL 8.70. The overall fit statistics indicated that the hypothesized model offered a good representation of the structures underlying the observed data (χ^2/df = 2.84, GFI = 0.91, AGFI = 0.89, NFI = 0.97, CFI = 0.98, RMSEA = 0.058). In Figure 2, most of the

Construct	Items	Factor loadings	Cronbach's α	Composite reliability (CR)	Average variance extracted (AVE)
CBR	CBR1	0.71	0.69	0.70	0.54
	CBR2	0.75			
COC	COC1	0.77	0.82	0.82	0.61
	COC2	0.83			
	COC3	0.73			
CB	CB1	0.83	0.90	0.90	0.69
	CB2	0.83			
	CB3	0.82			
	CB4	0.83			
SB	SB1	0.87	0.87	0.87	0.70
	SB2	0.79			
	SB3	0.84			
STB	STB2	0.94	0.88	0.88	0.79
	STB3	0.83			
HB	HB1	0.73		0.83	0.62
	HB2	0.77	0.83		
	HB3	0.85			
CS	CS1	0.89	0.84	0.85	0.73
	CS3	0.82			
WOM	WOM1	0.90	0.87	0.90	0.75
	WOM2	0.89			
	WOM3	0.80			
CE	CE1	0.78	0.84	0.84	0.64
	CE2	0.84			
	CE3	0.78			

Table II.
Statistics of
construct items

Construct	CBR	COC	CB	SB	STB	HB	CS	WOM	CE
CBR	*0.74*								
COC	0.64	*0.78*							
CB	0.52	0.46	*0.83*						
SB	0.46	0.64	0.46	*0.84*					
STB	0.30	0.28	0.35	0.19	*0.89*				
HB	0.33	0.36	0.12	0.19	0.16	*0.79*			
CS	0.50	0.62	0.59	0.76	0.25	0.22	*0.86*		
WOM	0.50	0.65	0.54	0.70	0.24	0.22	0.72	*0.87*	
CE	0.64	0.59	0.64	0.55	0.31	0.21	0.65	0.59	*0.80*

Table III.
Discriminant validity
and correlation of
constructs

hypotheses (*H1a*, *H1b*, *H1d*, *H2a*, *H2c*, *H2d*, *H3a*, *H3c*, *H3d* and *H4*) were significant in
the SEM prediction, except for the effects from customer-other customers relationships
to special treatment benefits (*H1c*), customer-brand relationships to social benefits
(*H2b*) and special treatment benefits to community satisfaction (*H3b*).

5.2.2 Test of moderating effects. To test the moderated relationships implied by
H5a-H6d for CE, we employed multiple group SEM. We built separate structural
models for the high-/low-CE groups and conducted a test of moderation to determine
whether the respective path coefficients are different. An unconstrained model was
compared with a constrained model wherein the two path coefficients were set to equal.
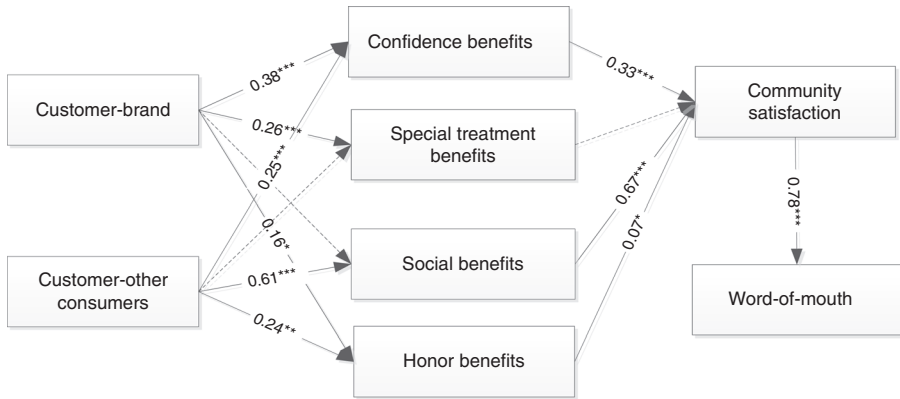
Figure 2.
Estimated model.
The results of
hypotheses

Notes: Standardized coefficients are used, dashed arrows represent non-significant paths.
***$p < 0.001$; **$p < 0.01$; *$p < 0.05$, respectively

A χ^2-difference test was used to assess the statistical significance of the difference in
the path coefficients between the subgroups (see Table IV).

The results confirmed that the higher the CE, the stronger the effects between
customer-brand relationships and confidence benefits (*H5a*), customer-other customers
relationships and confidence benefits (*H6a*). Additional analyses indicated that the
paths from harmonious brand community to other relationship benefits (special
treatment benefits, social benefits, honor benefits) showed no significant difference
between two subsamples based on CE (*H5b*, *H5c*, *H5d*, *H6b*, *H6c*, *H6d*). However, in
accord with our prediction, in all cases, the coefficient values were larger in the high-CE
subgroup when compared to the low-CE subgroup.

6. Summary and discussion
Based on social capital theory, we proposed a conceptual model to strive for a better
understanding of customers' perceived relationship benefits from harmonious
community relationships. Overall, our data support our conceptual framework and
underline the importance of harmonious relationships in a smartphone brand

| | Moderated model | | | |
| | Community engagement | | | |
Relationships	Low ($n = 244$)	High ($n = 299$)	χ^2 difference	Results
H5a: CBR→CB	0.085	0.547***	$\chi^2 (1) = 5.492, p < 0.05$	Supported
H5b: CBR→STB	0.064	0.290*	$\chi^2 (1) = 0.992, p > 0.05$	Not significant
H5c: CBR→SB	0.241**	0.355***	$\chi^2 (1) = 0.015, p > 0.05$	Not significant
H5d: CBR→HB	0.293**	0.321***	$\chi^2 (1) = 0.145, p > 0.05$	Not significant
H6a: COC→CB	−0.010	0.452***	$\chi^2 (1) = 11.45, p < 0.001$	Supported
H6b: COC→STB	0.073	0.224***	$\chi^2 (1) = 1.440, p > 0.05$	Not supported
H6c: COC→SB	0.481**	0.643***	$\chi^2 (1) = 0.082, p > 0.05$	Not significant
H6d: COC→HB	0.162*	0.427***	$\chi^2 (1) = 2.304, p > 0.05$	Not significant

Table IV.
Results of the
moderated models

Notes: ***$p < 0.001$; **$p < 0.01$; *$p < 0.05$, respectively

community in China for customers' perceived relationship benefits, satisfaction and positive word-of-mouth.

As shown in Figure 2, customer-brand relationships and perceived confidence benefits, special treatment benefits, honor benefits are significantly and positively related. This indicates that maintaining good relations with the smartphone brand can help reduce customer' anxiety, enhance his/her confidence in the brand, and get preferential treatment and gain recognition from other customers. Few studies have explored the antecedent variables of relationship benefits so far. Kim *et al.* (2011) has proved that rapport positively influence customers' perceived relationship benefits from the perspective of customer-to-employee interaction, in which perceived social benefits is very significant. But the influence of customer-brand relationships on social benefits is not significant in our research. That could be explained by the following reasons: although companies make use of social media platforms to timely communicate with customers, many commercial elements have been implanted into the customer-brand relationship, which weakens customer perceived social benefits; at present, social media are filled with countless advertisements that interfere with the customers' normal life, so that the initial communication between businesses and customers maybe is considered as marketing propaganda by customers, causing their exclusion and reverse psychology (Reid *et al.*, 2005); the confrontational buyer-seller relationship has developed in the course of transaction, more vivid display on B2C platform. The long-term fixed ideas make customers maintain a competitive model with businesses, which hinders the establishment of the friendship between them.

And customer-other customers relationships are significantly and positively related with customers' perceived confidence benefits, social benefits and honor benefits. That is, active customer-other customers relationships can better meet members' needs for confidence, social and honor benefits through intensely discussing, highly interacting and developing friendships with other customers in the smartphone brand community. However, customer-other customers relationships are not significantly related to customers' perceived special treatment benefits in our study. There may be the following reasons: the biggest feature of the social network platform based on information technology is open and transparent. In online brand community, members are in the same position, especially in the e-commerce circumstance, so the special treatment customers get remains highly restricted compared with the entity store; AS virtual environment, brand community based on social media is very difficult to stimulate the formation of customer joint purchase, which weakens the bargaining power of customers. In the smartphone market, facing the fierce competition, single and decentralized customers limitedly perceive special treatment.

The results of data analysis indicate that most sub-dimensions of relationship benefits exert strong positive impacts on customer satisfaction with community. The existing literature supports that relationship benefits helps to create customer satisfaction (Patterson and Smith, 2001; Hennig-Thurau *et al.*, 2002; Lee *et al.*, 2014), but among most of which confidence benefits are received more and rated as more important than the other relationship benefits (Gwinner *et al.*, 1998). But in our study, it was revealed that social benefits play the strongest impact on satisfaction than any other dimensions in the online smartphone brand community. The original intention to build social media is to construct up social communication and interaction platform between people, which is also the important factor to push people to join the social network. Therefore, customers' perceived social benefits from harmonious community relationships can effectively stimulate customer satisfaction.

It should be noted that some research confirms the positive link between special treatment benefits and customer satisfaction. But this study finds that perceived special treatment benefits are not significantly associated with community satisfaction. According to Maslow's hierarchy of needs, after a certain level of need to be satisfied, people will develop at a higher level, and pursuit the higher level of need, which becomes the driving force of behavior. With the gradual improvement of the living standard, people pay more and more attention to the needs of the respect and self-realization. So the impact of special treatment benefits on satisfaction is not significant may be due to "the hidden costs of rewards" or "crowding-out effect" (Frey, 1997), which means financial or other extrinsic rewards fail to contribute to the development of what can be called "true relationships". And the results of data analysis also indicate that community satisfaction bears a significant impact on positive word-of-mouth. Consistent with existing research results (Chen and Hu, 2010; Koritos *et al.*, 2014), when customers are satisfied with the smartphone community, they become favorable supporters of the community.

Finally, this research examined the moderating role of CE. As shown in the results of data analysis, the intensity of relationships between harmonious brand community and perceived relationship benefits varies between low-CE and high-CE. However, in addition to confidence benefits, the changes of other relationship benefits in two different groups are not significant. This suggests that harmonious community relationships can significantly reduce anxiety and inducing comfortable feeling under the condition of great enthusiasm customers have in contributing to the community. This finding supports the study of McAlexander *et al.* (2002). In spite of the changes in the other three variables (i.e. special treatment, social and honor benefits) is not significant, the influences also strengthen with the increasing of CE intensity, indicating CE partly amplifies the impacts of harmonious community relationships on customers' perceived relationship benefits.

7. Implications
7.1 Theoretical implications
Social media has not only promoted the customer-to-brand communication, but also greatly improved the customer-to-customer interaction, which provides a good platform for the development of harmonious brand community. Relationship benefits generated by harmonious community relationships can not only affect customers' attitude but also can influence their behaviors, bringing enormous competitive advantage for businesses. Thus the exploration of formation process of relationship benefits in smartphone community is an important research issue.

However, most of the previous studies focussed on the relationships between customers and brand or businesses. The emergence of social media has increased customers' power, which makes the effect of customer-other customers' relationships attract the attention of businesses and marketing scholars. Considering the importance of customer-other customers relationships on social media, our study examines perceived relationship benefits from the perspective of harmonious community relationships that include customer-brand relationships and customer-other customers relationships. The findings suggest friendly customer-other customers relationships are an important approach to boost perceived relationship benefits.

Second, because social media endows relationship benefits with novel features and manifestations, investing whether relationship benefits still affect customer satisfaction in online brand community context has taken on a new significance.

In traditional services, confidence benefits are received more and rated as more important than the other relationship benefits (Gwinner *et al.*, 1998). But in the social media situation, social benefits are more favored by customers, followed by confidence and honor benefits, respectively.

Finally, customer engagement has been labeled as an essential condition for the success of online customer environments. And our research also shows that CE has a positive impact on the connection between harmonious community relationships and relationship benefits. Despite the rise and attributed advantages of customer engagement, only little is known about the action mechanics of customer engagement within brand community on social media. This study explores the question how CE fulfills online brand community potential through implementing moderating effects between harmonious community relationships and perceived relationship benefits.

7.2 Practical implications

The characteristics of social media have facilitated the development of brand communities. Although brand communities based on social media offer excellent marketing opportunities, few businesses capitalize on them. This research emphasizes the role of harmonious smartphone community on perceived relationship benefits and engaging customers with community in social media contexts, illustrating that if customers can gain expected benefits in smartphone community, they can turn into the most truthful "preacher" of brand and community. This study thus makes the following suggestions for building and managing online brand communities.

The brand community based on social media effectively injects social factors into business activities, in particular, makes use of the bonds between customers to achieve the viral transmission of brand information. This study also suggests that good customer-other customers relationships can satisfy customers' social needs, eventually influencing customer satisfaction with the smartphone community. Relying on social media platform, managers could construct instant reply notification mechanism to shorten response time, classify forum into different subject areas to make customers readily join the discussions who are interested in, design customize introduction page and member list to help customers easily find friends with shared interests, and build group chat room to create a stimulating community atmosphere (Kuo and Feng, 2013). These interactivity-enhancing mechanisms contribute to harmonious customer-other customers relationships, resulting in the higher level of perceived social benefits and community satisfaction.

Social media platform has a lot of active brand enthusiasts, is a convenient channel for effectively and timely accessing to product information, and has been favored by the vast number of customers. For community members, acquiring product information is the primary motivation for joining brand communities, which helps to resolve disputes, reduce information asymmetries and mold the perceptions and expectations of interaction partners. The results showed that harmonious customer-brand-customer triangle can improve customers' perceived confidence in smartphones, leading a high level of community satisfaction. Moreover, when the brand's smartphones suffer a serious defect, customers usually perform more forgiving with the brand. In the realm of social media, the problems of product defects spread fast like a snowball, delivering the knockout blow to the company. If establishing a crucial emotional link with the brand and other customers, customers will show stronger tolerance and make patient communication with businesses (Wu and Wang, 2012).

In addition, the results highlight honor benefits also influence, minimally but significantly, on community satisfaction, implying that heightening customers' status and authority in smartphone community will help to enhance customer-community relationship quality. Furthermore, consistent with Hennig-Thurau *et al.*'s (2002) findings, the results of our study also challenge the adequacy of economic-based "satisfaction programs," as the offer of special treatment benefits to customers does not appear to significantly influence relationship marketing outcomes. These reflect spiritual and emotional benefits can win customers' greater backing compared with material benefits in social media age.

8. Limitations and future research

Despite our valuable contributions, we are also aware of some limitations in our study; these limitations indicate the avenues for further research. First, the sample was only selected from a smartphone brand community based on Sina Weibo and does not represent brand community population as a whole. Future research can conduct more specific studies examine the effect of harmonious brand community on customers' perceived relationship benefits across various product categories to provide deeper insights for brand community managers.

Second, because our study found no significant effect of special treatment benefits on community satisfaction in the smartphone community, special attention should be given to delineating among the different types of special treatment benefits in order to confirm that special treatment benefits are really unimportant in brand communities, or whether our findings only relate to our research contexts.

Third, because we collected cross-sectional data of a smartphone brand community based on Sina Weibo, we lost sight of the long-term consequences and the role changes of harmonious customer-brand-customer triad relationships in customers' perceived relationship benefits over time. Future research should collect longitudinal data to investigate dynamic effects.

Finally, the generalization of the present research is limited by the geographic scope of the sample (i.e. China). In recent years, the number involved in social media platform has been increasing and accounted for so much. Therefore, our sample should be regarded as interesting and meaningful. Still, further research should be conducted to take into account other nations in general, to identify any cross-culture variations in particular.

References

Adjei, M.T., Noble, S.M. and Noble, C.H. (2010), "The influence of C2C communications in online brand communities on customer purchase behavior", *Journal of the Academy of Marketing Science*, Vol. 38 No. 5, pp. 634-653.

Aggarwal, P. (2004), "The effects of brand relationship norms on consumer attitudes and behavior", *Journal of Consumer Research*, Vol. 31 No. 1, pp. 87-101.

Algesheimer, R., Dholakia, U.M. and Herrmann, A. (2005), "The social influence of brand community: evidence from European car clubs", *Journal of Marketing*, Vol. 69 No. 3, pp. 19-34.

Andersen, P.H. (2005), "Relationship marketing and brand involvement of professionals through web-enhanced brand communities: the case of Coloplast", *Industrial Marketing Management*, Vol. 34 No. 1, pp. 39-51.

Antcliff, V., Saundry, R. and Stuart, M. (2007), "Networks and social capital in the UK television industry: the weakness of weak ties", *Human Relations*, Vol. 60 No. 2, pp. 371-393.

Bagozzi, R.P. and Yi, Y. (1988), "On the evaluation of structural equation models", *Journal of the Academy of Marketing Science*, Vol. 16 No. 1, pp. 74-94.

Beatty, S.E., Mayer, M., Coleman, J.E., Reynolds, K.E. and Lee, J. (1996), "Customer-sales associate retail relationships", *Journal of Retailing*, Vol. 72 No. 3, pp. 223-247.

Bollen, K.A. (1989), *Structural Equations with Latent Variables*, Wiley-Interscience, New York, NY.

Chen, P.T. and Hu, H.H. (2010), "The effect of relationship benefits on perceived value in relation to customer loyalty: an empirical study in the Australian coffee outlets industry", *International Journal of Hospitality Management*, Vol. 29 No. 3, pp. 405-412.

Chiu, C.M., Hsu, M.H. and Wang, E.T. (2006), "Understanding knowledge sharing in virtual communities: an integration of social capital and social cognitive theories", *Decision Support Systems*, Vol. 42 No. 3, pp. 1872-1888.

Dessart, L., Veloutsou, C. and Morgan-Thomas, A. (2015), "Consumer engagement in online brand communities: a social media perspective", *Journal of Product & Brand Management*, Vol. 24 No. 1, pp. 28-42.

Elovici, Y., Glezer, C. and Shapira, B. (2005), "Enhancing customer privacy while searching for products and services on the World Wide Web", *Internet Research*, Vol. 15 No. 4, pp. 378-399.

Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.

Fournier, S. (1998), "Consumers and their brands: developing relationship theory in consumer research", *Journal of Consumer Research*, Vol. 24 No. 4, pp. 343-353.

Fournier, S. and Lee, L. (2009), "Getting brand communities right", *Harvard Business Review*, Vol. 87 No. 4, pp. 105-111.

Frey, B.S. (1997), *Not Just for the Money: An Economic Theory of Personal Motivation*, Edward Elgar, Cheltenham.

Graham, G. and Greenhill, A. (2013), "Exploring interaction: print and online news media synergies", *Internet Research*, Vol. 23 No. 1, pp. 89-108.

Grover, S.L. (2014), "Unraveling respect in organization studies", *Human Relations*, Vol. 67 No. 1, pp. 27-51.

Gummerus, J., Liljander, V., Weman, E. and Pihlström, M. (2012), "Customer engagement in a Facebook brand community", *Management Research Review*, Vol. 35 No. 9, pp. 857-877.

Gwinner, K.P., Gremler, D.D. and Bitner, M.J. (1998), "Relationship benefits in services industries: the customer's perspective", *Journal of the Academy of Marketing Science*, Vol. 26 No. 2, pp. 101-114.

Habibi, M.R., Laroche, M. and Richard, M.O. (2014), "The roles of brand community and community engagement in building brand trust on social media", *Computers in Human Behavior*, Vol. 37 No. 7, pp. 152-161.

Hair, J.F., Anderson, R.E., Tatham, R.L. and Black, W.C. (1998), *Multivariate Data Analysis*, Prentice Hall, London.

Hayduck, L.A. (1987), *Structural Equation Modeling with LISREL*, Johns Hopkins University Press, Baltimore, MD.

Hennig-Thurau, T., Gwinner, K.P. and Gremler, D.D. (2002), "Understanding relationship marketing outcomes: an integration of relationship benefits and relationship quality", *Journal of Service Research*, Vol. 4 No. 3, pp. 230-247.

Hsiao, C.C. and Chiou, J.S. (2012), "The impact of online community position on online game continuance intention: do game knowledge and community size matter?", *Information & Management*, Vol. 49 No. 6, pp. 292-300.

Jacobs, J. (1961), *The Death and Life of Great American Cities*, Random House, New York, NY.

Kietzmann, J.H., Hermkens, K., McCarthy, I.P. and Silvestre, B.S. (2011), "Social media? Get serious! Understanding the functional building blocks of social media", *Business Horizons*, Vol. 54 No. 3, pp. 241-251.

Kim, I., Jeon, S.M. and Hyun, S.S. (2011), "The role of effective service provider communication style in the formation of restaurant patrons' perceived relationship benefits and loyalty", *Journal of Travel and Tourism Marketing*, Vol. 28 No. 7, pp. 765-786.

Kim, W., Ok, C. and Gwinner, K.P. (2010), "The antecedent role of customer-to-employee relationships in the development of customer-to-firm relationships", *The Service Industries Journal*, Vol. 30 No. 7, pp. 1139-1157.

Kim, W.G., Han, J.S. and Lee, E. (2001), "Effects of relationship marketing on repeat purchase and word of mouth", *Journal of Hospitality and Tourism Research*, Vol. 25 No. 3, pp. 272-288.

Koritos, C., Koronios, K. and Stathakopoulos, V. (2014), "Functional vs relational benefits: what matters most in affinity marketing?", *Journal of Services Marketing*, Vol. 28 No. 4, pp. 265-275.

Kuo, Y.F. and Feng, L.H. (2013), "Relationships among community interaction characteristics, perceived benefits, community commitment, and oppositional brand loyalty in online brand communities", *International Journal of Information Management*, Vol. 33 No. 6, pp. 948-962.

Lee, M.R., Yen, D.C. and Hsiao, C.Y. (2014), "Understanding the perceived community value of Facebook users", *Computers in Human Behavior*, Vol. 35 No. 5, pp. 350-358.

Lee, Y.K., Choi, B.H., Kim, D.J. and Hyun, S.S. (2014), "Relationship benefits, their consequences, and customer membership types", *The Service Industries Journal*, Vol. 34 No. 3, pp. 230-250.

Levy, S.E., Getz, D. and Hudson, S. (2011), "A field experimental investigation of managerially facilitated consumer-to-consumer interaction", *Journal of Travel & Tourism Marketing*, Vol. 28 No. 6, pp. 656-674.

Liao, Y.W., Wang, Y.S. and Yeh, C.H. (2014), "Exploring the relationship between intentional and behavioral loyalty in the context of e-tailing", *Internet Research*, Vol. 24 No. 5, pp. 668-686.

Li, L., Ford, J.B., Zhai, X. and Xu, L. (2012), "Relationship benefits and manufacturer satisfaction: an empirical study of logistics service in supply chain", *International Journal of Production Research*, Vol. 50 No. 19, pp. 5445-5459.

Luo, N., Zhang, M. and Liu, W. (2015), "The effects of value co-creation practices on building harmonious brand community and achieving brand loyalty on social media in China", *Computers in Human Behavior*, Vol. 48 No. 7, pp. 492-499.

McAlexander, J.H., Schouten, J.W. and Koenig, H.F. (2002), "Building brand community", *Journal of Marketing*, Vol. 66 No. 1, pp. 38-54.

Muniz, A.M. and O'Gunin, T.C. (1996), "Brand community and the sociology of brands", *Advances in Consumer Research*, Vol. 23, pp. 265-266.

Muniz, A.M. Jr and O'Guinn, T.C. (2001), "Brand community", *Journal of Customer Research*, Vol. 27 No. 4, pp. 412-432.

Nahapiet, J. and Ghoshal, S. (1998), "Social capital, intellectual capital, and the organizational advantage", *Academy of Management Review*, Vol. 23 No. 2, pp. 242-266.

Nambisan, S. and Baron, R.A. (2009), "Virtual customer environments: testing a model of voluntary participation in value co-creation activities", *Journal of Product Innovation Management*, Vol. 26 No. 4, pp. 388-406.

Okazaki, S., Díaz-Martín, A.M., Rozano, M. and Menéndez-Benito, H.D. (2015), "Using Twitter to engage with customers: a data mining approach", *Internet Research*, Vol. 25 No. 3.

Patterson, P.G. and Smith, T. (2001), "Relationship benefits in service industries: a replication in a Southeast Asian context", *Journal of Services Marketing*, Vol. 15 No. 6, pp. 425-443.

Phillips, W.J., Wolfe, K., Hodur, N. and Leistritz, F.L. (2013), "Tourist word of mouth and revisit intentions to rural tourism destinations: a case of North Dakota, USA", *International Journal of Tourism Research*, Vol. 15 No. 1, pp. 93-104.

Reid, M., Luxton, S. and Mavondo, F. (2005), "The relationship between integrated marketing communication, market orientation, and brand orientation", *Journal of Advertising*, Vol. 34 No. 4, pp. 11-23.

Schau, H.J., Muñiz, A.M. Jr and Arnould, E.J. (2009), "How brand community practices create value", *Journal of Marketing*, Vol. 73 No. 5, pp. 30-51.

Schouten, J.W., McAlexander, J.H. and Koenig, H.F. (2007), "Transcendent customer experience and brand community", *Journal of the Academy of Marketing Science*, Vol. 35 No. 3, pp. 357-368.

Steiner, M., Eggert, A., Ulaga, W. and Backhaus, K. (2016), "Do customized service packages impede value capture in industrial markets?", *Journal of the Academy of Marketing Science*, Vol. 44 No. 2, pp. 151-165.

Su, Q., Li, L. and Cui, Y.W. (2009), "Analysing relationship benefits in e-business environment from behavioural perspective", *Systems Research and Behavioral Science*, Vol. 26 No. 2, pp. 129-142.

Van Dolen, W.M., Dabholkar, P.A. and De Ruyter, K. (2007), "Satisfaction with online commercial group chat: the influence of perceived technology attributes, chat group characteristics, and advisor communication style", *Journal of Retailing*, Vol. 83 No. 3, pp. 339-358.

Wu, L.W. and Wang, C.Y. (2012), "Satisfaction and zone of tolerance: the moderating roles of elaboration and loyalty programs", *Managing Service Quality: An International Journal*, Vol. 22 No. 1, pp. 38-57.

Wu, W.C., Ku, E.C. and Liao, H. (2015), "Intimate knowledge initiators: bonding the suppliers and buyers in the online group-shopping environment", *Internet Research*, Vol. 25 No. 1.

Zhang, S.S., van Doorn, J. and Leeflang, P.S. (2014), "Does the importance of value, brand and relationship equity for customer loyalty differ between Eastern and Western cultures?", *International Business Review*, Vol. 23 No. 1, pp. 284-292.

Further reading

Kankanhalli, A., Tan, B.C. and Wei, K.K. (2005), "Contributing knowledge to electronic knowledge repositories: an empirical investigation", *MIS Quarterly*, Vol. 29 No. 1, pp. 113-143.

Yen, H.R., Hsu, S.H.Y. and Huang, C.Y. (2011), "Good soldiers on the web: understanding the drivers of participation in online communities of consumption", *International Journal of Electronic Commerce*, Vol. 15 No. 4, pp. 89-120.

Appendix. Constructs and items

Customer-brand relationships (CBR)
(CBR1) The brand is of the highest quality.
(CBR2) The brand understands my needs.
(CBR3) I value the brand heritage.

Customer-other customers relationships (COC)
(COC1) I have met wonderful people because of the community.
(COC2) I feel a sense of kinship with other community members.
(COC3) I have an interest in the community for the other brand owners.

Confidence benefits (CB)
(CB1) I believe there is less risk that something will go wrong.
(CB2) I have more confidence the service will be performed correctly.
(CB3) I have less anxiety when I decide to use the brand.
(CB4) I feel I can trust the provider.

Social benefits (SB)
(SB1) I have developed friendships with certain members in the community.
(SB2) I enjoy certain social aspects of the relationship.
(SB3) I am recognized by certain members in the community.

Special treatment benefits (STB)
(STB1) I get better and faster services.
(STB2) I receive discounts or special deals as compared to most customers.
(STB3) My needs get extra attention.

Honor benefits (HB)
(HB1) My identity and status is reflected.
(HB2) I win the appreciation and recognition from others.
(HB3) I get great sense of pride and superiority.

Community Satisfaction (CS)
(CS1) Based on all my participation experience, I am satisfied with the community.
(CS2) I am satisfied with my decision to participation in the community.
(CS3) In general, this is a good community to participate in.

Word-of-mouth (WOM)
(WOM1) I will introduce the community to others.
(WOM2) I will speak favorably about the community to others.
(WOM3) I often recommend the community to my friends or family.

Community engagement (CE)
(CE1) I am motivated to participate in the brand community's activities because I feel better afterwards.
(CE2) I am motivated to participate in the brand community's activities because I am able to support other members.
(CE3) I am motivated to participate in the brand community's activities because I am able to reach personal goals.

About the authors
Mingli Zhang is a Professor of Digital Marketing at the Beihang University, Beijing, China. His main research interest has been in the area of customer behavior in e-marketing, branding strategies and customer value. His work has been published in *Computers in Human Behavior*, *Journal of Business-to-Business Marketing*, *Psychology & Marketing*, and other journals.

Nuan Luo is a PhD Candidate at the Department of Economics and Management, Beihang University, Beijing, China. Her research centers on information technology, social science and internet marketing. Her work has been published in *Computers in Human Behavior*. Nuan Luo is the corresponding author and can be contacted at: ln370274082@163.com