The success of online communities (e.g., also known as chat rooms and blogs), in which people share their ideas and interact online, has given rise to popular networking sites (e.g., YouTube, MySpace, Facebook) that connect millions of people scattered over vast distances, 24 hours a day (Riegner 2008). These sites and online communities in turn have attracted increasing advertising shares, reaching more than $30 billion in 2008 (Liu and Shrum 2009). Such “earning” abilities incite online communities to proliferate. Of special relevance to advertisers are consumption-related communities, which offer consumers a means to find detailed product information (Li, Daugherty, and Biocca 2003) and information about others’ usage experiences (Hung and Li 2007).

According to Kozinets (1999), these online consumption communities expand the power of word-of-mouth (WOM) exchanges, because consumers are free to share their personal experiences and in-depth product information. In both single-brand (e.g., theappleblog.com; harley-davidson.com) and multibrand (e.g., blogs.hotbikeweb.com) communities, members might change their brand preferences and brand loyalty according to other members’ WOM (Schlosser, White, and Lloyd 2006). Moreover, WOM communication moderates information dissemination (Goldenberg, Libai, and Muller 2001), affects product evaluation (Herr, Kardes, and Kim 1991), influences consumer satisfaction (Davidow 2003), and alters customer lifetime value (Hogan, Lemon, and Libai 2004). In this sense, these communities empower consumers to shift the conventional information asymmetry between firms and consumers. Therefore, advertisers attend increasingly to these communities and the WOM they generate by observing and monitoring exchanges and, in some cases, actively participating (Godes et al. 2005).

In contrast, the question of what drives site traffic has yet to be explored, even though the question is especially salient for Web hosts and advertisers. Studies on conventional media (e.g., newspaper and magazines) suggest that the credibility of a medium determines its authority and usefulness, which enhances readership. In an online context, we postulate that the integrity of an online consumption community (i.e., platform credibility) may determine Web traffic. Most communities allow members to express their opinions freely (with some filtering by the Webmaster), such that the information shared varies in quality and may be more or less reliable. Thus, consumers surf the Internet selectively, relying more on “official” sites and sites with high credibility.

The proliferation of popular community sites (e.g., Facebook) suggests another potential determinant, namely, whether the online community provides an environment marked by mutual trust and interactions. Trust among community members is very relevant, considering rising levels of Internet frauds and crimes. Most users assume a “user-beware” perspective toward Internet activities, and considering the perils of

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**ABSTRACT:** Online communities offer attractive opportunities and challenges to advertisers. Using a revised source credibility framework, this study proposes that interpersonal trust and platform credibility are core to consumer search and consumption behaviors that allow advertisers to harvest value from online communities. We postulate that (1) quality Web features, and user instrumental and relational need fulfillment are antecedents of interpersonal trust and platform credibility; (2) interpersonal trust is distinct from, and an important driver of, platform credibility; and (3) both constructs drive a user’s online community usage and brand variety seeking behavior. An online survey of 899 consumers in China supports these propositions and offers both research and managerial implications for this new media platform.

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potential fraud, stronger trust among members for one another should increase traffic to the online community.

Accordingly, we posit that platform credibility (the extent to which an online community Web site is perceived to be a credible medium) and interpersonal trust (trust among members) are integral to Web site visit frequency and intermember communication in an online community. Using platform credibility as the pivotal construct for our understanding of Web community behavior, we develop and test a model that encompasses the antecedents and effects of both drivers in the context of a multibrand online consumption community. In so doing, we pursue three objectives. First, we delineate how platform credibility and interpersonal trust operate. Second, we propose and examine how three antecedents—Web site features, users' instrumental need fulfillment, and users' relational need fulfillment—operate as antecedents to the two core constructs. Third, we investigate the consequences of platform credibility and interpersonal trust in terms of the time users spend in the community and their brand variety seeking behavior, both constructs of interest to advertisers and researchers.

We thus organize our paper as follows: We present a conceptual framework in which we delineate the nature, antecedents, and consequences of platform credibility and interpersonal trust, followed by a discussion of our major hypotheses. Then we discuss the research design—an online survey of 899 consumers in a multibrand community in China, our study context. Finally, we note the study findings and their implications.

CONCEPTUAL FRAMEWORK

Platform Credibility

Figure 1 displays our proposed model, including the antecedents and consequences of platform credibility and interpersonal trust. Credible sources enhance persuasion in various media formats (Bochner and Insko 1966; DeBono and Harnish 1988; Homer and Kahle 1990), and classical research efforts identify several pertinent characteristics of information sources, such as competence, expertise, and attractiveness (e.g., Hovland and Weiss 1951). Subsequent studies have also examined media characteristics such as objectivity, fairness, and lack of bias (Gaziano and McGrath 1986; Zhu and He 2002). Decades of research confirm that expertise and trustworthiness are the two most salient components of credibility (Fritch and Cromwell 2001; Ibelema and Powell 2001). Expertise refers to the extent to which a source provides correct information, and trustworthiness refers to the extent to which an audience perceives the source to be valid (Hovland and Weiss 1951).
However, online media differ from offline media in terms of interactivity and addressability, as well as the risk of third-party influences (e.g., hackers) (Leimeister, Ebner, and Krčmar 2005; Schlosser, White, and Lloyd 2006). Furthermore, whereas the audience of an offline medium can choose to remain anonymous, a Webmaster gains considerable information about Web users, including involuntarily provided data extracted from search behaviors. Thus, privacy protection is a salient issue. These characteristics place an extra burden on Web sites to guard against exploiters, who may pay, coerce, or otherwise steal information using technological means. This demand for additional integrity by Web sites moves beyond the trustworthiness dimension in conventional media credibility literature.

Therefore, we use the term platform credibility to describe users’ beliefs about an online community Web site’s credibility. This construct includes an expertise dimension, but we replace trustworthiness with integrity, a term that is more inclusive and accounts for characteristics of online media. To be credible, a community Web site must be an expert provider of information (Fritch and Cromwell 2001) as well as a party believed to have put users’ best interest first (Warnick 2004). Accordingly, our approach goes beyond an evaluation of whether a Web site provides valid information; it accounts for how it handles users’ information as well. In addition, platform credibility is particularly important in China’s unique media system (Zhu 1997), as evidenced in the debate surrounding Google’s exit from China (Business Insider 2010). Web sites managed with integrity should draw traffic and enhance users’ purchase intentions (Bart et al. 2005). We purport that credible Web sites have such positive effects.

To extend growing literature on brand communities (e.g., Muñiz and Schau 2005; Schouten and McAlexander 1995), we consider a multibrand context. Therefore, we can examine whether consumers engage in brand variety seeking behaviors (including brand switching) (Kahn, Kalwani, and Morrison 1986; McAlister and Pessemier 1982), a pivotal topic in increasingly competitive marketplaces.

Interpersonal Trust

Trust refers to an implicit belief that a partner will not engage in exploitive or opportunistic behaviors (Leimeister, Ebner, and Krčmar 2005). We consider the trust directed toward fellow online community members—interpersonal trust, which should be salient with regard to how users communicate and interact in the community. Increasing user exchanges should attract more Web site traffic, as well as the amount of time people spend in communities.

Studies of interpersonal trust and platform credibility originate from separate academic domains, however, each with different theoretical lenses. Platform credibility or related topics (source credibility) usually appear in communication literature (Bochner and Insko 1966; DeBono and Harnish 1988; Homer and Kahle 1990; Hovland and Weiss 1951), whereas interpersonal trust is a focus in social science studies (Leimeister, Ebner, and Krčmar 2005). To understand the effectiveness of online consumption communities, we propose to investigate how these two constructs operate and relate, as well as their antecedents and consequences.

Antecedents: Web Features

A salient resource in an online community is the supply of rich and reliable information. Information contents are user generated and beyond the control of the Webmaster, but features such as the site’s information structure and navigation enhance users’ access to information (Bart et al. 2005), can improve interactive learning and communications (Porter and Donthu 2008), and drive Web site credibility. In particular, “being able to easily navigate and find what you want” and “knowing that the site is updated frequently with new information” are “very important” indicators of Web site credibility (Princeton Survey Research Associates 2002), as echoed in surveys with diverse user groups (Fogg, Soohoo, and Danielson 2002; Oliver, Wilkinson, and Bennett 1997). A community Web site might include timely updates, hot threads, and comprehensive archives to organize and prioritize information resources (Porter and Donthu 2008). Such features that facilitate the use of the information resources of an online community should improve the community’s platform credibility.

Some prior studies have examined the positive relationship between Web features and interpersonal trust. Leimeister, Ebner, and Krčmar (2005) show that quality-assurance Web features can be designed and implemented systemically to enhance interpersonal trust in a health-care online community. We propose that users in a consumption community have similar needs; they share product knowledge with others in the community. Therefore:

H1: Web features that assure quality contents and navigability exert significant positive effects on a user’s perceptions of (a) platform credibility and (b) interpersonal trust in an online consumption community.

Antecedents: Fulfillment of Instrumental and Relational Needs

Whereas Web features represent design elements, instrumental and relational need fulfillment refer to the cognitive and relational dimensions of social benefits and capital for users (Jarvenpaa, Knoll, and Leidner 1998; Nahapiet and Ghoshal 1998) that determine how users perceive and evaluate an online community. The fulfillment of instrumental and relational
needs may be antecedents of platform credibility and interpersonal trust, as forms of social benefits and shared resources.

Social benefits pertain to a shared frame of reference (e.g., language, experience, norms of practice, goals) that motivates instrumental exchanges among members in social networks (Nahapiet and Ghoshal 1998). In consumption communities, users’ instrumental needs include product-relevant information, purchase advice, and validation for purchase decisions (Dholakia, Bagozzi, and Pearo 2004). These collective needs motivate other members to share their experiences, which itself is a form of social benefits and resources (Nahapiet and Ghoshal 1998; Porter and Donthu 2008). To facilitate these exchanges, communities might highlight topics of current interests, provide the latest development updates, and help users leverage their collective wisdom to fulfill their instrumental needs (Chiu, Hsu, and Wang 2006). When users’ instrumental needs are fulfilled, they likely exhibit stronger interpersonal trust in other users. In short, a community’s responsiveness is a core capability for its function as an exchange platform on which users can present and fulfill their instrumental needs. Well-designed Web features, including responsiveness, thus should be a positive antecedent of interpersonal trust (Ridings, Gefen, and Arinze 2002).

Another salient dimension of online communities involves the socialization potential. Instrumental needs aside, online community users often seek fulfillment of their relational needs through socializing with others in the community. The relational dimension of social capital captures users’ acquisition and maintenance of social ties, as well as their identification with the community (Dholakia, Bagozzi, and Pearo 2004) and need for social recognition and rewards (Fennell 1978).

In an online community, relational motivations urge users to seek approval and respect from fellow users (Nahapiet and Ghoshal 1998). These social rewards derive from and simultaneously encourage more WOM exchanges (Brown and Reingen 1987; Hung and Li 2007), which in turn drive community traffic (Wasko and Faraj 2000). When a user receives compliments from others, his or her relational needs are fulfilled. Such compliments also promote trust in interpersonal relationships. Therefore, relational need fulfillment should build users’ interpersonal trust.

This discussion clearly implies that the fulfillment of a user’s instrumental and relational needs precede interpersonal trust. Their effects on platform credibility remain unclear, however, and few studies have examined this relationship. Our general contention is that when users’ instrumental and relational needs are fulfilled in an online community, they likely transform satisfactory experiences into positive evaluations of the community sponsor, as is well supported in consumer satisfaction literature (Tse and Wilton 1988). Therefore, we propose:

H2: Fulfillment of instrumental needs leads to positive effects on users’ levels of (a) interpersonal trust and (b) platform credibility in a consumption community.

H3: Fulfillment of relational needs lead to positive effects on users’ levels of (a) interpersonal trust and (b) platform credibility in a consumption community.

Interpersonal Trust and Platform Credibility

Bourdieu (1986) famously argues that some social resources, such as interpersonal ties, substitute for or can be converted into other forms of social capital. For example, Wasko and Faraj (2000) show that lawyers and doctors participating in professional online communities willingly convert their personal know-how into a community resource. Based on the trust-transfer principle (Stewart 2003), Turel, Yuan, and Connelly (2008) find empirically that trust in an e-service representative increases users’ trust in the e-service provider. Thus, social resources at the individual level have the potential to be appropriated and contribute to social resources at the community level. Furthermore, “being able to trust the information on a site” is a key indicator of Web site credibility (Princeton Survey Research Associates 2002). Because information in an online community is user generated, we argue that users who trust the ability and integrity of fellow users to share quality information (i.e., interpersonal trust) increase platform credibility.

Consequences of Platform Credibility and Interpersonal Trust: Time Spent

In various behavioral domains, shared benefits promote a wide range of positive behaviors (Mayer, Davis, and Schoorman 1995). For example, in a trusting Internet environment, users are willing to act on information to which they are exposed and feel relaxed when they interact with others. This platform effect suggests that interpersonal trust and platform credibility enhance a user’s engagement with an online community and intentions to act on fellow users’ suggestions. Therefore, we discuss the effects of interpersonal trust and platform credibility on a user’s behavior.

A notable positive behavioral consequence of Web site engagement is the time a user spends surfing the site. This usage duration (Bhat, Bevans, and Sengupta 2002) is an important performance metric for Web sites (Danahe, Mullarkey, and Essegaier 2006), and a user’s time spent—that is, how long and how frequently a consumer visits and stays on the site—provides an objective measure of usage duration. Studies suggest that this construct reflects the user’s engagement in an online site better than loyalty or intention measures (Dholakia, Bagozzi, and Pearo 2004).
Research on e-commerce also provides substantial evidence in support of the positive effects of a firm’s e-platform credibility on behavioral outcomes. An e-vendor’s platform credibility significantly enhances the buyer’s level of satisfaction, commitment, and long-term relationship with the vendor (Luo 2002). It also helps buyers overcome the risks they perceive in releasing their personal information, making online transactions, and acting on an e-vendor’s advice (Luo 2002). Therefore, the firm’s platform credibility should increase the time spent on a Web site.

Activities in an online community differ from those on e-commerce sites, however. In particular, online community users are less concerned with product quality, because few products are bought and sold. Online protection (e.g., privacy) remains a system concern though. Therefore, we postulate that in an online community, when the user perceives the site as credible, he or she perceives less risk in surfing in the community and spends more time in it.

_H4a_: Platform credibility exerts direct positive effects on users’ time spent in an online consumption community.

Prior research also shows that interpersonal trust enhances users’ desire to engage in informational exchange (Chiu, Hsu, and Wang 2006; Leimeister, Ebner, and Krcmar 2005; Ridings, Gefen, and Arinze 2002). We extend this finding to propose that interpersonal trust has positive effects on time spent in communities. Online community users behave similarly to consumers on e-commerce Web sites and patients on health-care sites. Specifically, they rely on the online community as an efficient platform to communicate. Through the system dependence effect, a user who trusts fellow users but not the host site likely spends only limited time surfing the online community. Therefore, we propose:

_H4b_: Interpersonal trust exerts positive effects on the users’ time spent, indirectly through the mediation of platform credibility.

Consequences of Platform Credibility and Interpersonal Trust: Brand Variety Seeking

Variety seeking describes exploratory behavior that satisfies a consumer’s intrinsic need to try different things (Givon 1984). Consumers can practice variety seeking in both on- and offline contexts, but the online environment provides a larger feasible choice set, as well as more flexibility, convenience, and time savings, thus removing some constraints that characterize offline shopping.

Yet many consumers refrain from online transactions because of their perceptions of higher risks. Van Trijp, Hoyer, and Inman (1996) suggest that trust reduces risk perceptions; it also facilitates the acceptance of e-business recommendations (Komiak and Benbasat 2004) and higher purchase prices (Ba and Pavlou 2002). That is, to overcome the risks of online recommendations, consumers need trusting relationships. We operationalize variety seeking as a user’s effort to try different brands; thus, we use the term “brand variety seeking.” Building on prior studies and our conceptual framework, we propose that platform credibility and interpersonal trust in an online community reduce risk perceptions and enhance intentions to try different brands. Similar to our arguments in H4, we propose direct effects of platform credibility and indirect effects of interpersonal trust on brand variety seeking:

_H5a_: Platform credibility exerts significant positive effects on users’ intention to try new brands.

_H5b_: Interpersonal trust exerts significant positive effects on users’ intention to try new brands indirectly through the mediation of platform credibility.

Variety seeking also might be motivated by a desire for group affiliation (McAlister and Pessemier 1982), as manifested in a desire to follow the changing behavior of peers (Menon and Kahn 1995). We propose that relational ties (i.e., how users perceive their relationships) with an online community increase willingness to follow other users’ suggestions, which leads to greater brand variety seeking behavior. Moreover, more time spent in the online community should increase the user’s exposure to information about different brands and enable more learning about different brands, promoting a higher intention to try varied brands. Therefore:

_H6_: Users’ (a) relational need fulfillment and (b) time spent in an online consumption community significantly increase intentions to try new brands.

**STUDY DESIGN**

Our study context is a beauty care online community sponsored by a commercial portal, OnlyLady in China (www.onlylady.com, OL). According to a Web traffic metric provider, cn.alexa.com, OL ranks among the top 200 Web sites (181) in China. Beauty products represent an intensely competitive product category and are the most heavily advertised category in China (Lamy 2010). Most cosmetics ads carry few intrinsic cues though, and consumers often find it difficult to make informed brand decisions (Hung, Gu, and Tse 2005). Consumer-generated WOM can fill this informational gap and reduce the costs of information search among consumers.

By 2009, China had the world’s largest Internet population, with more than 338 million users (Lamy 2010). A recent comparative study revealed that Chinese Internet users are more involved in online community activities (e.g., commenting on blogs) and rely more on online user-generated contents (62%) than their U.S. counterparts (28%) when they make...
consumption decisions (Riegner 2008). These characteristics may partly result from the severe and persistent product safety issues in China, which prompt consumers to turn to their peers to seek product and consumption information. These distinct consumer-related and institutional characteristics also point to the need to expand research to cultures other than the United States (Gefen and Heart 2006).

**OnlyLady.com: Online Beauty Care Community**

OnlyLady (OL) hosts 17 online communities of interest to women (e.g., parenting, romance, beauty care) and attracts 63% of visitors to log on and visit its communities. The most popular is the beauty care community, which accounts for 22.1% of all threads on OL. An analysis of the postings in this community (Hung and Li 2007) shows that users exchange many diverse personal experiences with beauty care products and brands. They discuss brands according to multiple criteria, including price, reputation, effectiveness, and potential side effects. Users also alert others to lesser-known brands and summarize their different experiences with the product. Some of the most knowledgeable users even discuss the chemical ingredients in products and their effects.

Exposure to this pool of rich, varied information helps users develop knowledge about beauty care products and differences across brands. Members synthesize and systematize fragments of disparate information to develop criteria for selecting a product (e.g., “Safety is no. 1”). They also identify specific needs (e.g., dry skin) and the effectiveness of products in different seasons (e.g., winter). They go beyond brand names and examine product ingredients in an “objective, factual” manner (e.g., “It does not matter which brand [of facial cleanser] you pick, but pick one that has **DECYL GLUCOSIDE** as MEANED??”) and decyl glucoside as the major cleansing ingredient). Thus, postings in this community are consistent with Riegner’s (2008) finding that online communities represent important information sources for Chinese Internet users. In addition to informative “straight talk,” members use the interactive platform to pose questions related to their specific beauty care needs so other users can respond and provide relevant suggestions.

This site also reveals a strong sense of community. Users often address one another as *jie-meì* (meaning “older sister”/*younger sister*). Some members even become celebrities by virtue of spending extended time in the online community and exhibiting extensive efforts to develop and post detailed, highly credible threads and responding to fellow users’ inquiries. Users show their appreciation for such goodwill and efforts (e.g., “I really want to hug you”). Most exchanges are collegial; offensive ones prompt reproach. Thus, users follow a specific “netiquette” (McLaughlin, Osborne, and Smith 1995) that they mutually reinforce.

We obtained approval from the Webmaster and manager of OL to conduct our study. Prior to doing so, a research colleague registered as an OL member, observing and participating in the online community for 18 months to become familiarized with its culture and to understand how it facilitates consumption information exchanges. To register, a user must provide contact information (e-mail address, mailing address, and phone number), a username, and password; demographic details are optional. As is common in most online communities, anyone can read the OL postings, but only registered users (i.e., members) may post or reply to threads.

With approval from the Webmaster, the research team posted a thread on OL with a hyperlink to our survey Web site and invited users to participate. During the one-week survey period, our survey Web registered 1,384 clicks and 1,100 completed responses, of which 899 were usable. We deleted 201 responses that were repeats, had unreasonably short completion times (less than four minutes), or were completed by users who were not members of the community. Survey participants each received a fashion magazine as an incentive (US$3) and a chance to enter a lottery for a cosmetics kit (US$80).

**Sample Characteristics**

Compared with the average Internet user in China (CNNIC 2005), our respondents were younger (95.7% versus 71% ≤ 30 years) and more educated (76.9% versus 29% with bachelor degree or more), with higher incomes (27.1% versus 11% ≥ RMB4,000). These characteristics are consistent with consumers of cosmetics in general, who represent an upper-income segment in China (Hung and Li 2006). The survey respondents are actively involved with the online community: 86.4% have been members for six months or more, 96.8% visit the community at least once a week, 94.8% spend half an hour or more browsing per session, and 34.1% post or reply to a message (i.e., thread) at least once a week.

**Measures**

The measures in this study (which we detail in the Appendix) were adapted from prior research. Palmer (2002) suggests that quality-assurance Web features include the efficiency, navigability, and organization of the message board. In the consumer’s mind, Web quality also depends on the convenience of information search, usefulness of updates, organization of the archive, and overall quality (Danaher, Mullarkey, and Essequier 2006). Our measure reflects these various consumption needs.

For our measure of platform credibility, we turned to Ibelema and Powell (2001) and Warnick (2004); it refers to users’ perceptions of the expertise and integrity of the community Web site. Our measure of interpersonal trust came from
Leimeister, Ebner, and Krcmar (2005), in reference to users’ perceptions of the ability and integrity of fellow users. Prior studies of trust have examined three dimensions: competence, integrity, and benevolence (e.g., Jarvenpaa, Knoll, and Leidner 1998), though most research into online trust focuses on the first two dimensions, because benevolence aligns closely with integrity as a result of the shared norm of reciprocation in online communities (e.g., Ridings, Gefen, and Arinze 2002; cf. Porter and Donthu 2008). We adopted measures of instrumental and relational need fulfillment from Bagozzi and Dholakia (2006), and adapted variety-seeking measures from Kahn, Kalwani, and Morrison (1986). All the measures used five-point Likert scales (1 = strongly disagree, 5 = strongly agree); we provide the correlation pattern in Table 1.

Podsakoff and colleagues (2003) suggest obtaining data from different response formats to reduce common method error; this method eliminates the effects of consistency, implicit theories, social desirability tendencies, and dispositional and transient mood states. We therefore assess time spent (from Bagozzi and Dholakia 2006) as a dependent variable, such that it uses a format different from those that apply to the remaining measures. We operationalize time spent as the product of average weekly frequency and the average duration of each visit to the community.

**ANALYSIS AND RESULTS**

**Measurement and Conceptual Models**

We conducted a confirmatory factor analysis using AMOS 17.0. The results indicate that the measurement model achieves good fit, ***AU: PLS. INDICATE WHICH SPECIAL CHARAC- TER BELONGS HERE.*** $\chi^2(206) = 436.58$, confirmatory fit index (CFI) = .97, normed fit index (NFI) = .97, goodness-of-fit index (GFI) = .96, adjusted goodness-of-fit index (AGFI) = .95, root mean squared error of approximation (RMSEA) = .04. The loadings on the intended theorized constructs were all significant ($p < .001$) (see the Appendix), and the composite reliabilities ranged from .75 to .94. We applied Fornell and Larcker’s (1981) procedures to assess discriminant validity and found that all square roots of the average variance extracted (on the diagonal in Table 1) were higher than the correlations with other constructs. Thus, the measures exhibited adequate convergent and discriminant validity. Regarding the structural model, the results again indicated good fit, $\chi^2(213) = 474.02$, $p < .001$; CFI = .97, NFI = .94, GFI = .96, AGFI = .94; RMSEA = .04. We report the path coefficients in Figure 1.

**Hypotheses Testing**

**Antecedents of Platform Credibility and Interpersonal Trust**

As we hypothesized, Web features exert significant positive effects on platform credibility ($\beta = .32$, $p < .001$) and interpersonal trust ($\beta = .23$, $p < .001$), in support of H1a and H1b. Furthermore, instrumental (platform $\beta = .08$, $p < .10$; interpersonal $\beta = .39$, $p < .001$) and relational (platform $\beta = .13$, $p < .001$; interpersonal $\beta = .27$, $p < .001$) need fulfillment exerted significant influences on platform credibility and interpersonal trust, in support of H2 and H3. That is, all our proposed antecedents have the hypothesized effects on the core components.

**TABLE 1**

**Correlation Matrix of the Constructs in Measurement Model**

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<th>6</th>
<th>7</th>
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<tbody>
<tr>
<td>1. Web features</td>
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<td>2. Instrumental need fulfillment</td>
<td>.23***</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>3. Relational need fulfillment</td>
<td>.22***</td>
<td>.13***</td>
<td>.82</td>
<td></td>
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<td></td>
<td></td>
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<td>4. Interpersonal trust</td>
<td>.33***</td>
<td>.37***</td>
<td>.35***</td>
<td>.95</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Platform credibility</td>
<td>.48***</td>
<td>.34***</td>
<td>.37***</td>
<td>.63***</td>
<td>.94</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Time spent</td>
<td>.10**</td>
<td>.14***</td>
<td>.17***</td>
<td>.16***</td>
<td>.15***</td>
<td>—</td>
<td></td>
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<tr>
<td>7. Brand variety seeking</td>
<td>.09***</td>
<td>.12***</td>
<td>.19***</td>
<td>.20***</td>
<td>.23***</td>
<td>.13***</td>
<td>.79</td>
</tr>
</tbody>
</table>

*The diagonal refers to the construct AVE (average variance extracted).

**Notes:**
- **p < .01 level (two-tailed).**
- **p < .001 level (two-tailed).**
To examine the direct and indirect effects of platform credibility and interpersonal trust on our first dependent variable, we developed four nested models: M0 is the null effect model, and M1–M3 follow the Holmbeck (1997) procedures for testing mediation effects. These procedures are similar in logic and approach to Baron and Kenny’s (1986) test, though they are better adapted to structural equation modeling, whereas the latter method is more suitable for regression analysis. Thus, M1 (direct effect model) links interpersonal trust directly to the dependent variable; M2 (indirect effect model) links interpersonal trust directly to platform credibility and then links platform credibility directly to the dependent variable; and M3 (saturated model) links interpersonal trust directly to both platform credibility and our dependent variable, as well as platform credibility directly to the dependent variable. For the sake of parsimony, we display only the focal constructs in Figure 2, though our analyses are based on the full model (except for paths linking focal constructs). The initial analysis showed that all nested models achieved adequate fit (Figure 2).

In H4a, we hypothesized a direct effect of platform credibility on time spent. The null effect (M0) model, which proposes that time spent is influenced only by platform credibility and not by interpersonal trust ($\beta = .21$, $p < .001$); the indirect effect (M2) model ($\beta = .20$, $p < .001$); and the saturated (M3) model ($\beta = .17$, $p < .001$) all exhibited significant direct effects, in support of H4a.

To assess whether platform credibility mediates the impacts of interpersonal trust on time spent, as we predicted in H4b, we compared M1 with M3 (Holmbeck 1997). If all three models have adequate fit, the paths are significant in both M1 and M2, and M3 provides no significant improvement in fit over M2, we can conclude that platform credibility significantly and fully mediates the impacts of interpersonal trust on time spent. We report the results of this model comparison in Table 2.

Specifically, the results show that interpersonal trust exerted direct positive effects on time spent (M1 $\beta = .19$, $p < .001$) and on platform credibility (M2 $\beta = .60$, $p < .001$), which in turn significantly affected time spent (M2 $\beta = .20$, $p < .001$). We then compared the saturated model (M3) with the indirect effect model (M2), but found that M3 did not provide a signifi-
cantly better fit ($\chi^2_{\text{diff}} = .11$, $df_{\text{diff}} = 1$, $p > .50$) (Table 2, row 3). Therefore, platform credibility fully mediates the effects of interpersonal trust on time spent, in support of H4b.

Platform Credibility, Interpersonal Trust, and Brand Variety Seeking

We conducted a similar set of analyses to examine the effects of our core components on brand variety seeking. Again, the models provided adequate fit (see Figure 2). The findings in the null effect (M0) ($\beta = .26$, $p < .001$), indirect effect (M2) ($\beta = .25$, $p < .001$), and saturated (M3) ($\beta = .24$, $p < .001$) models again revealed significant, direct effects, in support of H5a. We summarize the results of our model comparison in Table 3.

To estimate the effect of interpersonal trust on brand variety seeking, as mediated by platform credibility, we compared M1 with M3. Interpersonal trust exerted significant direct effects on brand variety seeking ($\beta = .18$, $p < .001$) and had a significant direct effect on platform credibility ($\beta = .60$, $p < .001$), which then significantly affected brand variety seeking ($\beta = .25$, $p < .001$). The saturated model (M3) did not provide a significantly better fit than M2 ($\chi^2_{\text{diff}} = .01$, $df_{\text{diff}} = 1$, $p > .50$) (Table 3, row 3). In support of H5b, platform credibility fully mediates the effects of interpersonal trust on brand variety seeking.

Finally, the results show that relational need fulfillment ($\beta = .18$, $p < .001$) exerts significant, positive effects on brand variety seeking, in support of H6a. Time spent ($\beta = .17$, $p < .001$) also exerts significant positive effects on brand variety seeking. Perhaps brand variety seeking instead motivates users to spend more time in an online community, rather than representing an outcome; therefore, we ran a post hoc analysis and estimated an alternative model that reversed the direction of the path between time spent and brand variety seeking. With variety seeking as an independent variable, we compared the fit of the alternative model ($\chi^2_{[213]} = 484.72$) with that of our proposed model ($\chi^2_{[213]} = 474.02$; see Figure 1). The proposed model clearly achieved better fit, and the findings provide support for H6b.

DISCUSSION AND CONCLUSION

As new media that facilitate the diffusion of WOM communication and thereby influence consumers, online communities present attractive opportunities and challenges to advertisers. Not all online communities are equally effective, however; some exhibit great growth, and others never quite take off. We propose that platform credibility (from communication literature) and interpersonal trust (from social sciences) are salient factors that distinguish effective from ineffective online communities. To verify our proposed integrative model, we test its outcomes with regard to a popular online community in China.

Our findings show that the effects of interpersonal trust on both time spent and brand variety seeking are fully mediated by platform credibility. These findings have key implications for advertisers, in that prior research suggests the effects of interpersonal trust on learning and behavioral change but offers limited ideas about how an advertiser might exert any

### TABLE 2
Mediation Analysis (Time Spent)

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>GFI</th>
<th>NFI</th>
<th>Compare</th>
<th>$\chi^2_{\text{diff}}$</th>
<th>df_{\text{diff}}</th>
</tr>
</thead>
<tbody>
<tr>
<td>M0. Null</td>
<td>616.06</td>
<td>214</td>
<td>.94</td>
<td>.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1. Direct</td>
<td>621.18</td>
<td>214</td>
<td>.94</td>
<td>.92</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M2. Indirect</td>
<td>474.02</td>
<td>213</td>
<td>.96</td>
<td>.94</td>
<td>M3 versus M2</td>
<td>.11</td>
<td>1</td>
</tr>
<tr>
<td>M3. Saturated</td>
<td>473.91</td>
<td>212</td>
<td>.96</td>
<td>.94</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: GFI = goodness-of-fit index; NFI = normed fit index.

### TABLE 3
Mediation Analysis (Brand Variety Seeking)

<table>
<thead>
<tr>
<th>Model</th>
<th>$\chi^2$</th>
<th>df</th>
<th>GFI</th>
<th>NFI</th>
<th>Compare</th>
<th>$\chi^2_{\text{diff}}$</th>
<th>df_{\text{diff}}</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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<td>.94</td>
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<td></td>
</tr>
</tbody>
</table>

Notes: GFI = goodness-of-fit index; NFI = normed fit index.
control over users and their trust in one another. Our findings offer advertisers a means to identify online communities with high levels of platform credibility, however, which are the ideal locations to post their advertising. Users in these communities will spend more time, be more attentive to communication messages, and exhibit more openness to influences, such that they are likely to try different brands.

We also examined three antecedents of platform credibility and interpersonal trust: Web features and users’ instrumental and relational need fulfills. All three antecedents exert positive effects on platform credibility, but quality-assurance Web features (e.g., the provision of accurate, updated, quality contents) exert significantly stronger effects than do user need fulfills. This result represents another promising implication for advertisers, who can use target audience surveys or professional judgments to identify online communities that possess the most favorable Web features. Our observations of OL show, for example, that this site has made substantial improvements in its Web features over time, and its Web traffic continues to increase. For example, the site highlights postings that have received the most recent updates and the most frequent clicks, and it also features “hot threads” and “editor’s choices” based on independent expert opinions. These features facilitate search processes while also awarding social recognition to users who post these featured threads. It would be presumptuous to attribute onlylady.com’s success (i.e., one of China’s top 200 Web sites) directly to its Web feature improvements, but our findings imply they certainly have been contributing factors. Different online communities attract diverse users, so Webmasters should be well versed in users’ expectations about informational content and clearly communicate their Web sites’ abilities and integrity to users. Because we also find strong effects of need fulfillment on interpersonal trust, we further suggest that online community Webmasters should work to attract users who are motivated opinion leaders, because their presence will popularize the community.

Our study focuses on a multibrand online community, but other communities that provide high-quality, specific contents might be more likely to meet user expectations. Therefore, advertisers developing brand-specific online communities can benefit from our findings. The “return on IT” for superior Web features can grant firms an effective advantage in their efforts to engage consumers in the digital world.

Moreover, the significant impacts of these core components on a user’s time spent in the online community provide useful implications for community sponsors and advertisers. More time spent allows users to contribute knowledge and encourages an active and participative culture. This process promotes the development and popularity of the community; it also helps Web owners and advertisers commercialize their communities. Higher online traffic implies more opportunities for online advertising, promotions, and sponsorships.

Our findings regarding the positive effects of core components on variety seeking may alert advertisers to some opportunities and challenges posed by WOM communication in online communities. On the one hand, consumers are more open to try new brands and thus develop larger, more diverse consideration sets when they make brand choice decisions (Hung and Li 2007). On the other hand, cultivating consumer loyalty to a specific brand may be more difficult, considering the persuasive, highly diversified comments from community users. Recent studies show that WOM in online communities has stronger effects on brand referrals than do traditional marketing tactics (Trusov, Bucklin, and Pauwels 2009). We suggest that advertisers should attend carefully to potential negative effects, because interactions in online communities can greatly complicate and shift consumers’ brand selections.

Our study thus suggests several areas that deserve additional research efforts. There are several different forms of online community participation, ranging from passive lurking to active leading in posting “hot threads” for a particular discussion topic. Thus, we acknowledge the crucial need to create a typology of the drivers of different forms of participation and their relative effectiveness. After all, online communities can only survive with committed members.

Finally, we note several limitations in this study. We studied a single online community, and the characteristics of this community may create a specific context pertaining to the two core components, platform credibility and interpersonal trust. For example, this community is fairly active and successful, whereas a community with lower activity levels may experience less relational need fulfillment and potentially lower levels of interpersonal trust. Moreover, we acknowledge the potential for self-selection effects in our sample; it would be unlikely that we obtained data from users with low trust in this site. In addition, the community involves a high proportion of women, and previous research has shown that men and women process information differently (Hung, Li, and Belk 2007). Therefore, further research should investigate a broader range of online communities to verify the generalizability of our findings in different contexts. Our study is correlational, so the direction of the relationships between constructs that we have identified demands further empirical confirmation through different research methods (e.g., experiments). It would be difficult to control systematically for trust, so research might conduct longitudinal studies of selected online communities to assess the differential effects of platform credibility and interpersonal trust over time.
REFERENCES


APPENDIX

Model Constructs and Measures

**Web features: CR = .75, AVE = .44**
Based on your opinions of the Only Lady (henceforth, OL) beauty care online community, please indicate your level of agreement or disagreement with the following sentences:

1. The OL beauty care community provides efficient updates on hot threads. \( .560 \)
2. The OL beauty care community provides convenient information search. \( .601 \)
3. The OL beauty care community archives useful threads containing rich and concise information. \( .778 \)
4. The OL beauty care community invigilates the postings well to maintain quality. \( .737 \)

**Instrumental need fulfillment: CR = .83, AVE = .63**
Based on the reasons you browse or participate in the OL beauty care online community, please indicate your level of agreement or disagreement with the following sentences:

1. To obtain relevant product or consumption information. \( .573 \)
2. To learn more about skin care and makeup. \( .603 \)
3. To seek advice on my purchase decisions. \( .658 \)

**Relational need fulfillment: CR = .86, AVE = .67**
Based on the reasons you browse or participate in the OL beauty care online community, please indicate your level of agreement or disagreement with the following sentences:

1. My opinions are respected by members of the community. \( .811 \)
2. Members of the community agree with my opinions. \( .915 \)
3. I am a valuable member of the community. \( .588 \)

**Platform credibility: Second-order factor, CR = .93, AVE = .88**
With regard to the OL beauty care community, please indicate your agreement or disagreement with the following sentences:

**Expertise: First-order factor, CR = .81, AVE = .68**
1. The OL beauty care community provides the information I need. \( .893 \)
2. The information provided in the OL beauty care community is accurate. \( .760 \)

**Integrity: First-order factor, CR = .84, AVE = .73**
1. The OL beauty care community won’t misuse members’ personal information. \( .759 \)
2. The OL beauty care community acts on behalf of its members. \( .776 \)

**Interpersonal trust: Second-order factor, CR = .95, AVE = .91**
With regard to fellow members in the OL beauty care community, please indicate your agreement or disagreement with the following sentences:

**Ability: First-order factor, CR = .92, AVE = .79**
1. Members are experienced with beauty and cosmetics issues. \( .939 \)
2. Members’ experience helps me cope with my problems. \( .850 \)
3. The comments/suggestions provided by members are easy to understand. \( .797 \)

**Integrity: First-order factor, CR = .94, AVE = .88**
1. Members strive to provide honest answers and sincere suggestions, \( .829 \)
2. Members are willing to share their consumption experiences. \( .907 \)

**Time spent**
Product of:

How frequently did you visit the OL beauty care community per week during the last month?
How much time do you spend on average when you browse the OL beauty care community?

**Brand variety seeking: CR = .77, AVE = .62**
I have tried different brands of cosmetics. \( .697 \)
Trying different brands is fun to me. \( .590 \)
I have tried most of the brands members recommended. \( .634 \)

\( \chi^2(206) = 436.58, p < .001; \) GFI = .96, AGFI = .95, CFI = .97, NFI = .95; RMSEA = .04

**Notes:** CR = construct reliability; AVE = average variance extracted; SFL = standardized factor loading; GFI = goodness-of-fit index; AGFI = adjusted goodness-of-fit index; CFI = comparative fit index; NFI = normed fit index; RMSEA = root mean square error of approximation.