Effectiveness of online consumer reviews

The influence of valence, reviewer ethnicity, social distance and source trustworthiness

Carolyn A. Lin and Xiaowen Xu

Department of Communication, University of Connecticut, Storrs, Connecticut, USA

Abstract

Purpose – Extant research addressing how consumers respond to electronic word-of-mouth (eWOM) remains limited. Even less attention has been devoted to examining the trustworthiness of consumer reviewers with different ethnic backgrounds. The purpose of this paper is to explore the influence of reviewer ethnicity, review valence and social distance (to three different ethnic groups) on perceived reviewer trustworthiness, brand attitude and purchase intention toward a product evaluated by reviewers of three ethnic backgrounds.
Design/methodology/approach – The study adopted a 2 (review valence)×3 (reviewer ethnicity) design; 398 participants were randomly assigned to one of the six conditions. A mock product-review web page for each study condition was created to manipulate review valence and reviewer ethnicity.
Findings – Results show that while review valence, reviewer ethnicity and social distance each had a significant effect on perceived reviewer trustworthiness, only review valence had an influence on brand attitude and purchase intention. The interaction between reviewer ethnicity and review valence also had a significant effect on perceived reviewer trustworthiness, brand attitude and purchase intention.
Originality/value – The current study is the first to apply social distance theory to explain cross-cultural perception of trust, as it extends and updates the original social distance scale to broaden its empirical relevance to contemporary society via an eWOM marketing context. As social distance is a fluid and timely concept to study the diverse ethnic cultural environment, the current findings carry strong implications to future research in a wide variety of digital communication and marketing contexts, among others.
Keywords Social distance, eWOM Marketing, Message valence, Racial/ethnic identity, Source trustworthiness
Paper type Research paper

Introduction

Electronic word-of-mouth (or eWOM) is a source of brand and product information for consumers in today's digital marketing environment (Chen and Xie, 2008). In practice, eWOM assumes the role of a repository of "unplanned" marketing messages that are generated, shared and seen by consumers (Ghose and Ipeirotis, 2006; Park *et al.*, 2007). Hence, eWOM could be a powerful venue for facilitating online trade and marketing, as it allows customers to publicly share their opinions and evaluations of products on the internet, based on their personal use experiences (Chatterjee, 2001). As such, the image of a company, including its brand and products, could benefit from or be harmed by the unpredictable, uncensored and uncontrolled eWOM platform (Craig *et al.*, 2015; Park *et al.*, 2007).

Amazon, Yelp, Hotel.com and many other online commerce sites provide open access mechanisms for publishing user-generated reviews, which also foster online communities among the consumer reviewers. A recent Google analysis (based on 57 million online consumer reviews) reported that approximately 50 percent of store purchase decisions were influenced by online consumer reviews (Morrison, 2015). Online consumer reviews can thus function as consumer-generated "sales assistants" to facilitate consumer searches for products that best match their consumption needs; these reviews have also been used to forecast sales (Chern *et al.*, 2015; Chen and Xie, 2008; Moon *et al.*, 2014).

Even so, the credibility of online consumer reviews could come into question, as some online review forums were found to have profited from their referrals and received

advertising income (Chatterjee, 2001; Chevalier and Mayzlin, 2006). Recently, Amazon took legal action against those who had published "consumer reviews" on its website for a fee (Roberts, 2015).

Extant research on eWOM has primarily focused on the key features of consumer-generated review messages such as length, comprehensiveness, valence, argument quality, content equivocality, relevance and style of these reviews (Cheng and Ho, 2015; Li and Zhan, 2011; Liang *et al.*, 2014; Filieri, 2015; Schindler and Bickart, 2012). Hence, more research is needed to help ascertain how the source of a consumer-generated review about a product may influence perceived trustworthiness of the reviewer as well as consumer attitude and purchase intention toward the product (Hansen *et al.*, 2014; Smith *et al.*, 2005).

As the spending power of African, Hispanic and Asian consumers has risen sharply in the last decade, the importance of multiculturalism in marketing research has also increased (Humphreys, 2013). Yet little is known about how consumers from these ethnic groups respond to user-generated consumer reviews (Pookulangara and Koesler, 2011). The same is true of the lack of research that investigates how the ethnic identity of consumer reviewers may influence consumer perceptions of source trustworthiness, attitudes and purchase intentions toward the product reviewed (Racherla *et al.*, 2012).

To help fill the theoretical and empirical gaps in the influence of source credibility of eWOM and multicultural marketing on consumer behavior, the current study intends to test a conceptual framework drawn from persuasion, social identity and social distance theories to examine the social relations between consumer reviewers with different ethnicities and Caucasian review readers (or majority consumers). The objectives of this study are to ascertain whether there is a difference in perceived social relations between Caucasian consumers and consumer reviewers from the same and a different ethnic background; and whether such relations may influence consumer trust in the reviewers, as well as consumer attitude and purchase intention toward the product reviewed. Study findings will help explain how source trustworthiness and social-relationship distance may impact consumer decision-making process in a multicultural eWOM marketing context. These findings could also benefit marketers in developing their brand management and marketing communication strategies online.

Literature review and hypotheses

Consumer trust in user-generated reviews is likely the primary determinant of the effects of these reviews, which are posted by other consumers and seen as unrelated to the marketer's interest. The discussion below will advance literature applicable in this context, beginning with the concept of source trustworthiness.

Source trustworthiness

Research on the effects of online consumer reviews confirms that perceived source credibility of online consumer reviewers significantly influenced other consumers' purchase intentions (Al-Debei *et al.*, 2015; Ayeh *et al.*, 2013; Filieri, 2015). For instance, perceived reviewer credibility positively impacted perceived eWOM review credibility in an online discussion forum, which in turn directly enhanced product-purchase intentions (Chih *et al.*, 2013). Likewise, reviewer source credibility moderated the effects of the persuasiveness and completeness of product recommendations on perceived recommendation credibility, via an online consumer discussion forum (Luo *et al.*, 2013).

The presence of identifiable reviewer information (e.g. name and residential location) was found to improve the perceived credibility of online hotel reviews, which amplified their persuasiveness and impact on booking intention (Xie *et al.*, 2011). Moreover, the influence of source credibility associated with online consumer reviewers on brand attitude and purchase intention was also comparable to that of perceived source credibility associated with offline

product reviewers (Owusu *et al.*, 2016). To understand the potential effects of this trust factor in relation to multiethnic consumer reviewers, the following hypotheses are proposed:

H1a. Perceived reviewer trustworthiness will be positively related to post-exposure brand attitude.

H1b. Perceived reviewer trustworthiness will be positively related post-exposure purchase intention.

Past research also shows that consumer reviewer trustworthiness is influenced by message factors such as the valence of the reviews. In essence, a positive or negative consumer-generated review will likely help other consumers decide whether the reviewer is trustworthy, which in turns helps shape consumers' attitude and purchase intention toward the product itself.

Message valence

Sen and Lerman's (2007) study reported that study participants considered a negative review on a hedonic product as less useful and attributed the negative review to the reviewer's low levels of honesty and capability; participants also viewed a negative review of a utilitarian product as more useful and attributed the negative review to product-related reasons, such as product quality. Duan *et al.* (2008) argued that online consumer reviews could affect consumer perceptions of a hedonic product (e.g. movies) differently from a utilitarian product (e.g. laundry detergent), as the volume rather than the valence of those comments was found to predict box office revenues. These findings are similar to those reported by other studies that investigated low- vs high-involvement conditions. Lab experiments showed that participants in the high-involvement condition took the central information-processing route and were more influenced by the argument strength of reviews, compared to participants in the low-involvement condition, who used the peripheral route and were more influenced by review quantity (Lee, 2009; Park *et al.*, 2007).

Schlosser (2011) suggested that perceptions of reviewer ability and willingness (being genuine) to tell the truth about product use moderated the effectiveness of a two-sided comment (containing both positive and negative evaluations), when participants perceived inconsistencies between the rating and arguments given by the reviewer. Park and Park (2013) found that heterogeneous reviews were more likely than homogeneous reviews to generate biased product evaluations, depending on prior product preference. The authors ascribed the results to attribution bias: when the heterogeneity was attributed to the reviewers, consumers evaluated the product based on prior expectation; when the heterogeneity was attributed to the product, consumers were more likely to provide negative product evaluations (Park and Park, 2013).

Jeong and Koo's (2015) study tested review valence (negative vs positive) and review objectivity (objective vs subjective) with South Korean participants. Their findings indicated that while an objective but negative online review was seen as most useful for purchase decision making, both an objective and subjective positive reviews significantly increased product-related attitude and purchase intention. Additional research has also identified several factors that could moderate the effect of message valence of online consumer reviews. For instance, Ketelaar *et al.* (2015) argued that message valence had a stronger effect on purchase intention for novice camera consumers than expert consumers.

Based on both lab results and Amazon website data, Zhang *et al.* (2010) revealed that for consumers who evaluated products associated with promotion consumption goals – or a product used for creating something (i.e. photo-editing software) – positive reviews were more persuasive than negative reviews, due to a positivity bias. Conversely, for consumers who evaluated products associated with prevention consumption goals – or a product used for avoiding problems (i.e. anti-virus software) – negative reviews more than positive

reviews were deemed helpful, due to a negativity bias. Individual risk tolerance could also play a role in influencing consumer attitudes, as high risk-averse travelers perceived negative reviews to be more useful than positive reviews (Casaló *et al.*, 2015).

Other research shows that positive consumer review statements are more valuable to readers than negative consumer review statements, because the former suggests that a further consideration of the product is merited (Forman *et al.*, 2008; Li and Zhan, 2011; Mudambi and Schuff, 2010). A hotel industry study suggests that positive online consumer reviews are more effective than negative reviews in enhancing consumer intentions for booking (Tsao *et al.*, 2015). A similar study also indicates that when positive online consumer reviews and numerical rating details are shown together, they could increase hotel-booking intentions (Sparks and Browning, 2011). Likewise, Chevalier and Mayzlin (2006) demonstrated that one-star (negative) reviews had a greater negative impact on online book sales than five-star (positive) reviews.

Drawing from the theory and literature reviewed above, the hypotheses postulated below are intended for validating the relations between review valence, reviewer trustworthiness as well as consumer attitude and purchase intention in a multicultural context:

H2a. Review valence will positively influence perceived reviewer trustworthiness.

H2b. Review valence will positively influence post-exposure brand attitude.

H2c. Review valence will positively influence post-exposure purchase intention toward the product.

Perceptions of source trustworthiness, brand attitudes and purchase intentions can also be influenced by factors related to one's social identity, particularly when multiracial consumer reviewers are involved. The discussion below will review the literature relevant to this theoretical proposition.

Social identity
According to the concept of social identify, as defined by social identity theory (Tajfel and Turner, 1986; Tajfel, 1981), people tend to view themselves as members of selected groups (in-groups), in order to differentiate themselves from others (out-groups) (Xu, 2014). People are also more likely to agree with their in-group members than with out-group counterparts (Mackie, 1986; Platow *et al.*, 2000). In particular, people view an in-group source as being more credible in defining reality than an out-group source (Turner, 1987; Xu, 2014, p. 4). Information-source identity was also found to motivate people to process the message via a central cognitive processing route, by increasing perceived group relevance of the issue (Platow *et al.*, 2000; Xu, 2014, p. 4).

Flanagin and Metzger (2000) suggested that customer opinions were more influenced by online reviews with whom they identify. Racherla *et al.* (2012) also pointed out that perceived socio-demographic background similarity between an online reviewer and a reader was found to influence the reader's trust in the source. Forman *et al.* (2008) suggested that when online community members of a review website rated reviews containing identity-descriptive information about a reviewer more positively, such ratings could enhance subsequent product sales. The authors attribute the finding to peer recognition and conformity to community norms (Forman *et al.*, 2008).

Whittler (1989, 1991) demonstrated that racial prejudice of Caucasians was found to moderate the effect of an advertising model's race on identification with the model, interest in obtaining more product information, and reactions to source cues. Additional research also indicates that study participants had more favorable attitudes toward a model or spokesperson who shared their own ethnic background (Jeong *et al.*, 2014); they also perceived the model or spokesperson with their ethnic background to be more similar to

themselves and more credible (Martin *et al.*, 2004). Other studies show that ads with models or spokespersons from the same racial/ethnic group as the consumers were more effective in influencing product attitude and purchase intention – than models or spokesperson from a different racial/ethnic group – across samples of Caucasian, African-American, Latinos and Asian-American participants (Cano and Ortinau, 2012; Elias *et al.*, 2011; Martin *et al.*, 2004; Sierra *et al.*, 2012).

The current study intends to validate whether perceived similarity in racial/ethnic identity between a reviewer and a Caucasian reader will influence a reader's perception of reviewer trustworthiness, in addition to their attitude and purchase intention toward the product reviewed. Based on the relevant theoretical explication of in-group similarity dynamics and empirical evidence discussed above, the following hypotheses are proposed:

H3a. Reviewers with a similar racial/ethnic identity will be rated more trustworthy than reviewers with a different racial/ethnic identity.

H3b. Reviewers with a similar racial/ethnic identity will have a greater influence on post-exposure brand attitude than reviewers with a different racial/ethnic identity.

H3c. Reviewers with a similar racial/ethnic identity will have a greater influence on post-exposure purchase intention than reviewers with a different racial/ethnic identity.

A corollary conception to social identity involves the concept of social distance. We explore perceived social distance and the extent to which it can influence perceptions of source trustworthiness, brand attitudes and purchase intentions in the section to follow.

Social distance

Bogardus (1925) defined social distance as the level of acceptance individuals feel toward others of varying ethnicities. The construct measures an individual's comfort and sympathy level toward interacting with members outside of one's in-group in a variety of contexts and types of interpersonal relationships (Birrell, 1989). Allport (1954) suggested that perceptions about racial and ethnic groups could be influenced by factors such as personal familiarity and interaction experience with individuals from these racial ethnic groups. Empirical studies suggest that ethnic groups tend to prefer contact with in-group members in general more than with out-group members; they also rate perceived social distance differently between themselves and different out-groups (Hagendoorn, 1995; Parrillo and Donoghue, 2013; Randall and Delbridge, 2005).

According to Randall and Delbridge (2005), white participants reported the smallest social distance toward whites, followed by African-Americans, Canadians, Africans, Mexicans, Asians, Puerto Ricans, Cubans, Indians (from India), Russians and Arabs as target groups. Weaver's (2012) summary of five national public opinion polls showed that black, Hispanic, Jewish and white participants did not want Asian-Americans as neighbors or to marry their close relatives, compared to individuals from their own ethnic groups. Jerabek and de Man (1994) found that Canadian Caucasians perceived less social distance toward the immigrant "out-groups" – i.e., Asians, Latino-Americans and Eastern European immigrants – than the social distance that these out-groups perceived toward each other; Caucasians were also more accepted by these out-groups, compared to the degree to which these out-groups accepted each other. A study on adolescents' dating relationships suggested that black females and white males were most likely to have same-ethnicity relationships outside of school; Hispanic males and females preferred to date across ethnicities in school (Strully, 2014).

Muraskin and Iverson's (1958) early study reported a relationship between perceived social distance and perceived similarity in that the greater the perceived social distance toward a minority group, the greater the perceived dissimilarity to members of that minority group.

Likewise, perceived interpersonal similarity based on demographics and personality traits is correlated with social closeness (Liviatan *et al.*, 2008). Wathen and Burkell (2002) contend that perceived similarity between source and receiver is an important factor influencing perceived source trustworthiness on the internet. Other studies also show that perceived similarity between a spokesperson and the audience from the same racial/ethnic group has a positive effective on product attitudes and purchase intention (e.g. Elias *et al.*, 2011).

Hence, it is reasonable to assume that perceived social distance could impact how a reader perceives the trustworthiness of a message source as well as the reader's attitude and purchase intention toward the product reviewed. Based on the research and theory operative in this context, then, we posit that:

H4a. Lower perceived social distance will be positively related to perceived reviewer trustworthiness.

H4b. Lower perceived social distance will be positively related to post-exposure brand attitude.

H4c. Lower perceived social distance will be positively related to product-purchase intention.

Lastly, consistent with previous advertising and marketing literature (e.g. Martin *et al.*, 2004), consumer attitude is hypothesized to predict purchase intention. More formally:

H5. Pre-exposure and post-exposure brand attitude will be positively related to post-exposure purchase intention.

Method
The study sample was recruited from the student population of a large northeastern university in the USA. College students are an ideal population for studying online consumer reviews, as they prefer word-of-mouth as a source (50.5 percent) for receiving product information relative to any other advertising or promotional sources (On Campus Research, 2012). Students from a multi-section introductory general education course were invited to participate in this study; participants were offered extra course credit. Study data were collected during a one-week period in April of 2015. The initial sample yielded 812 responses; after removing incomplete responses, 620 responses were retained in the final sample. The responses from the Caucasian participants ($n = 398$) were utilized for data analyses to meet study objectives. The average age of the sample was 19.19 (SD = 1.17); the gender split was 50.3 percent males and 49.7 percent females. By focusing on the Caucasian participants as the baseline for evaluation, the relationships between majority consumers and multiethnic consumer reviewers could be compared to validate the theoretical assumptions proposed in the study.

Procedure
The internet-based study protocol was approved by the IRB. After expressing informed consent via reviewing a consent form online, participants were randomly assigned to one of the six study conditions via this 2×3 between-subject design. These six conditions included: two levels of message valence (positive vs negative) and three reviewers with different ethnic identities (Caucasian vs African-American vs Asian-American). Participants first responded to a set of questions that measured demographics, social distance (toward Caucasians, African and Asian-Americans) and existing attitude toward a brand (i.e. the Hampton Inn). They then reviewed the mock Yelp page, which contained either a positive or negative review of the Hampton Inn posted by a Caucasian, African-American or Asian-American reviewer. Afterwards, participants were asked to rate the reviewer trustworthiness, in addition to their attitude toward the hotel and intention to book the hotel in the near future.

Stimulus

The experimental stimulus was a mock Yelp review page about the Hampton Inn. While eWOM has been found to influence online sales performance of hotels (Wang *et al.*, 2015) and Yelp is a popular online customer review site, the Hampton Inn is considered as affordable for most travelers and the top mid-market hotel brand (The Harris Poll, 2015). The mock web page contains a description about the Downtown Hampton Inn in Miami, including price, amenities, a "star" rating (indicating the quality of hotel amenities) and a consumer review. It also displayed two interior photos of a hotel room and a separate photo of a pool and a gym. A male reviewer shown via a profile photo and a user name – in addition to a Yelp-style user profile – also appeared on the mock web page. The photo images of the three ethnic reviewers were created based on a composite of photo images of male college students – compiled through a Google search – from each respective racial/ethnic group. Appearing next to each profile photo was a consumer review of the Hampton Inn. The valence of the review was manipulated by either a positive or negative tone in the review, in conjunction with the "star" rating system of Yelp. While a negative review appeared with a one-star image, a positive review was presented next to a five-star image.

Manipulation check

Participants were asked to identify the reviewer ethnic identity via a dichotomous measure; results show that they correctly identified the ethnicity of each reviewer (χ^2 (4) = 646.22, $p < 0.001$). They also successfully evaluated the valence of the customer review as either negative ($M = 2.16$, SD = 1.43) or positive ($M = 6.24$, SD = 0.84) on a seven-point scale (1 "strongly disagree" to 7 "strongly agree") (t (322.03) = −34.20, $p < 0.001$). Reviewer physical attractiveness was also assessed; ANOVA results show that perceived physical attractiveness level differed across the three reviewers (F (2, 395) = 16.66, $p < 0.001$). The *post hoc* analysis indicates that the African-American reviewer ($M = 4.76$, SD = 1.47) was seen as most attractive, followed by the Caucasian reviewer ($M = 4.16$, SD = 1.39) and the Asian-American reviewer ($M = 3.76$, SD = 1.38). Based on these results, physical attractiveness was analyzed as a covariate.

Measures

Social distance. This construct was operationalized to reflect two dimensions: social contact and social relationship. Six items were constructed to measure "social contact;" these items ask participants to separately evaluate their comfort level in making social contact with individuals who are Caucasian, African or Asian-Americans on a seven-point scale (1 = "not comfortable" and 7 = "totally comfortable"). The six items include: recruiting the individual to be a roommate/housemate, teaming up with the individual in a work-group, hanging out with the individual at school, initiating social contact with the individual, socializing with the individual as a co-worker and reporting to the individual as a supervisor. Another six items adapted from the widely adopted Bogardus (1925) scale were utilized to measure participant comfort level to engage in a "social relationship" with each ethnic group. These six items are having the individual as a next-door neighbor, bonding with the individual as a friend, having the individual as a relative through marriage, bringing the individual into one's family through marriage, going out on a date with the individual and conversing with the individual on the street.

All items were later reverse coded, so that a lower score indicated a smaller social distance or a greater comfort level. Principal component analysis with varimax rotation was conducted for both sets of measures for each ethnic message source condition. Each set of measures produced a one-factor solution. For the "social-contact" factor, the final reliability levels were 0.96, 0.95 and 0.98 for Asian-Americans, African-American and Caucasians, respectively.

For the "social-relationship" factor, the final Cronbach's reliability coefficients were 0.90, 0.89 and 0.97 for Asian-Americans, African-Americans and Caucasians, in that order.

Pre-exposure brand attitude. This concept was assessed using a seven-point scale (1 = strongly disagree and 7 = strongly agree). A principal component analysis generated a single dimension for the three items ($\alpha = 0.94$).

Reviewer trustworthiness. This construct was reflected by five measurement items on a semantic differential scale, adapted from Ohanian (1990). The factor analysis generated a single dimension. After removing one item with a low α value based on the initial reliability test, the remaining four-item scale – including unreliable-reliable, undependable-dependable, dishonest-honest and insincere-sincere – yielded a strong Cronbach's coefficient (0.94).

Post-exposure brand attitude. Participant attitude toward the hotel was measured by six original items and gauged on a seven-point scale (1 = "strongly disagree" and 7 = "strongly agree"). A sample item states, "I believe that this is a reasonably good hotel." The Cronbach's reliability for these items is 0.94.

Purchase intention. This concept was described by three original measurement items and evaluated on a seven-point scale (1 = "strongly disagree" and 7 = "strongly agree"). A sample item includes, "I will consider staying at this hotel, if I travel to Miami with my friends." The Cronbach's reliability for the three items is 0.95.

Results

To compare perceived social distance toward Caucasians, Asian-Americans and African-Americans, a pairwise *t*-test was conducted (see Table I). Results showed that participants perceive smaller social distance in making "social contact" with Caucasians ($M = 1.29$, $SD = 0.83$) than with Asian-Americans ($M = 1.63$, $SD = 1.00$, $t(397) = -7.59$, $p < 0.001$) or African-Americans ($M = 1.67$, $SD = 1.05$, $t(397) = -8.52$, $p < 0.001$); their perceived "social-contact" comfort level with Asian-Americans and African-Americans is not significantly different ($t(397) = -1.41$, $p = 0.16$). Participants perceived smaller social distance in entering in a "social relationship" with Caucasians ($M = 1.31$, $SD = 0.85$) than with Asian-Americans ($M = 2.05$, $SD = 1.16$, $t(397) = -13.25$, $p < 0.001$) or African-Americans ($M = 2.13$, $SD = 1.19$, $t(397) = -14.28$, $p < 0.001$); they also perceive a greater "social-relationship" comfort level with Asian-Americans than with African-Americans ($t(397) = -2.44$, $p < 0.05$).

ANCOVAs were conducted to test the research hypotheses and answer the research questions. To facilitate data analysis, a new variable was created to align the responses for the two-factor social distance measures with each ethnically identified reviewer. While reviewer ethnicity and message valence were treated as fixed factors, "social contact" and "social relationship" and "physical attractiveness" were entered as covariates for the "trustworthiness" model; the "post-exposure attitude" model also included "pre-exposure attitude" as a covariate. The "purchase intention" model included all the covariates mentioned above and "post-exposure attitude" as a covariate. The interaction effect between

Variables	Ethnic group	M (SD)	Ethnic group	M (SD)	t
Perceived comfort level	Caucasian	1.29 (0.83)	Asian	1.63 (1.00)	−7.59***
in making social contact[a]	Caucasian	1.29 (0.83)	African	1.67 (1.05)	−8.52***
	Asian	1.63 (1.00)	African	1.67 (1.05)	−1.41
Perceived comfort level	Caucasian	1.31 (0.85)	Asian	2.05 (1.16)	−13.25***
in entering social relationship[b]	Caucasian	1.31 (0.85)	African	2.13 (1.19)	−14.28***
	Asian	2.05 (1.16)	African	2.13 (1.19)	−2.44*

Notes: [a,b]A lower value reflects a greater comfort level and a shorter social distance. ***$p < 0.001$; **$p < 0.01$; *$p < 0.05$

Table I.
Pairwise comparisons
for perceived social
distance to Caucasian,
Asian and African-
Americans

the two fixed factors on perceived trustworthiness was tested for the "post-exposure attitude" model; the interaction effect between physical attractiveness and trustworthiness – two related source credibility dimensions (Ohanian, 1990) – was tested for "post-exposure attitude" and "purchase intention" models.

H1a posits that perceived reviewer trustworthiness would be positively related to post-exposure brand attitude. Results demonstrate that reviewer trustworthiness had a significant effect on post-exposure brand attitude (F (1, 386) = 5.67, $p < 0.05$, partial $\eta^2 = 0.01$), providing support for *H1a* (see Table II). *H1b* asserts that perceived reviewer trustworthiness would be positively related to post-exposure purchase intention. No significant effect was found; *H2b* was thus not validated (see Table III).

H2b postulates that review valence would influence post-exposure brand attitude. Findings indicate a significant main effect (F (1, 386) = 369.11, $p < 0.001$, partial $\eta^2 = 0.53$), showing that a positive review generated a more positive post-exposure brand attitude ($M = 5.46$, SE = 0.07) than a negative review ($M = 3.41$, SE = 0.07) (see Table II). *H2c* presumes that review valence would influence purchase intention. Results reflect a significant main effect (F (1, 385) = 7.08, $p < 0.01$, partial $\eta^2 = 0.02$), indicating that a positive review significantly predicted a stronger purchase intention ($M = 4.54$, SE = 0.09) than a negative review ($M = 4.16$, SE = 0.09) (see Table III).

H2a proposes that review valence would influence perceived reviewer trustworthiness. Results reveal a significant main effect (F (1, 389) = 10.84, $p < 0.01$, partial $\eta^2 = 0.03$),

	df	F	p	η^2
Review valence	1,386	433.64	***	0.53
Reviewer ethnicity	2,386	1.93	0.15	0.01
Review valence × reviewer ethnicity	2,386	10.75	***	0.05
Covariates				
Pre-exposure brand attitude	1,386	33.12	***	0.08
SD-social contact	1,386	0.37	0.54	< 0.01
SD-social relationship	1,386	0.55	0.46	< 0.01
Source trustworthiness	1,386	5.67	*	0.01
Physical attractiveness	1,386	2.95	0.09	0.01
Trustworthiness × physical attractiveness	1,386	3.18	0.08	0.01

Table II.
ANCOVA results for post-exposure brand attitude

Notes: SD, social distance. $R^2 = 0.59$. *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

	df	F	p	η^2
Review valence	1,385	7.08	**	0.02
Reviewer ethnicity	1,385	0.31	0.74	< 0.01
Review valence × reviewer ethnicity	2,385	0.17	0.84	< 0.01
Covariates				
Pre-exposure brand attitude	1,385	15.69	***	0.04
Post-exposure brand attitude	1,385	249.65	***	0.39
SD-social contact	1,385	0.79	0.37	< 0.01
SD-social relationship	1,385	2.11	0.15	< 0.01
Source trustworthiness	1,385	2.48	0.12	< 0.01
Physical attractiveness	1,385	1.32	0.25	< 0.01
Trustworthiness × physical attractiveness	1,385	1.66	0.20	< 0.01

Table III.
ANCOVA results for purchase intention

Notes: SD, social distance. $R^2 = 0.68$. *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

suggesting that a reviewer who posted a positive review was seen as more trustworthy ($M = 5.64$, SE $= 0.07$) than a reviewer that posted a negative review ($M = 5.32$, SE $= 0.07$, see Table IV).

H3a assumes that participants will rate a racially/ethically similar reviewer as more credible than a racially/ethically dissimilar reviewer. Results show that there was a significant main effect of reviewer ethnicity on perceived reviewer trustworthiness (F (2, 389) $= 13.12$, $p < 0.001$, partial $\eta^2 = 0.06$). The *post hoc* analysis suggests that the Caucasian reviewer was rated as less trustworthy ($M = 5.12$, SE $= 0.09$) than either the Asian-American ($M = 5.58$, SE $= 0.08$, $p < 0.001$) or the African-American reviewer ($M = 5.74$, SE $= 0.09$, $p < 0.001$); perceived trustworthiness between the Asian-American and African-American reviewers was not significantly differentiated. *H3a* hence generated significant findings that were not in the hypothesized direction (see Table IV). A significant interaction effect between reviewer ethnicity and review valance (F (2, 389) $= 3.24$, $p < 0.05$, partial $\eta^2 = 0.02$) was also found. The *post hoc* analysis shows that when the review was negative, the African-American reviewer ($M = 5.75$, SE $= 0.12$) was rated most trustworthy, compared to the Asian-American reviewer ($M = 5.32$, SE $= 0.12$) and the Caucasian reviewer ($M = 4.88$, SE $= 0.12$). When the review was positive, the Asian-American reviewer was rated most trustworthy ($M = 5.83$, SE $= 0.12$), relative to the African-American reviewer ($M = 5.74$, SE $= 0.13$) and the Caucasian reviewer ($M = 5.36$, SE $= 0.12$).

H3b proposes that a racially/ethnically similar reviewer will positively influence post-exposure attitude toward the hotel more than a reviewer representing another race/ethnicity. The effect of reviewer ethnicity was not significant, hence *H3b* was not supported (see Table II). Nonetheless, the interaction effect between review valence and reviewer ethnicity was significant (F (2, 386) $= 10.75$, $p < 0.001$, partial $\eta^2 = 0.05$). When the review was negative, participants in the African-American reviewer condition ($M = 3.05$, SE $= 0.12$) had the most negative attitude toward the hotel, compared to the Asian-American reviewer condition ($M = 3.47$, SE $= 0.11$) and the Caucasian reviewer condition ($M = 3.72$, SE $= 0.12$). When the review was positive, participants in the Asian-American reviewer condition expressed the most positive attitude toward the hotel ($M = 5.62$, SE $= 0.12$), relative to the African-American reviewer condition ($M = 5.57$, SE $= 0.13$) and the Caucasian reviewer condition ($M = 5.19$, SE $= 0.12$).

H3c presumes that reviewers with a similar racial/ethnic identity will positively influence post-exposure purchase intention more than reviewers with a dissimilar racial/ethnic identity. This hypothesis was not supported, since no main effect was generated. The interaction between reviewer ethnicity and review valence was also not significant; purchase intention hence did not differ significantly in the three ethnic reviewer conditions (see Table III).

H4a-H4c investigate the assumptions that perceived social distance to Caucasian, Asian and African-Americans will predict perceived trustworthiness, brand attitude and purchase

	df	F	p	$\eta2$
Review valence	1,389	10.84	**	0.03
Reviewer ethnicity	2,389	13.12	***	0.06
Review valence × reviewer ethnicity	2,389	3.24	*	0.02
Covariates				
Physical attractiveness	1,389	24.20	***	0.06
SD-social contact	1,389	5.74	*	0.02
SD-social relationship	1,389	0.81	0.37	< 0.01

Notes: SD, social distance. $R^2 = 0.22$. *$p < 0.05$; **$p < 0.01$; ***$p < 0.001$

Table IV.
ANCOVA results for
perceived source
trustworthiness

intention associated with the consumer reviews posted by reviewers from these ethnic groups, respectively. Results from testing *H4a* reveal that the "social-contact" factor of social distance was a significant predictor of perceived reviewer trustworthiness (F (1, 389) $= 5.74$, $p < 0.05$, partial $\eta^2 = 0.02$), suggesting that participants' comfort level in making social contact with these three ethnic groups influenced their trust in reviewers with these ethnic backgrounds (see Table IV). The "social-relationship" factor did not show a significant effect on reviewer trustworthiness, indicating that the comfort level with entering into an interpersonal relationship with these three ethnic groups was irrelevant to participant trust in reviewers with these ethnic backgrounds. *H4b* and *H4c* similarly failed to receive support, as neither "social contact" nor "social relationship" had a significant impact on post-exposure brand attitude (see Table II) or purchase intention (see Table III).

H5 proposes a positive relationship between brand attitude and purchase intention. Both pre-exposure attitude (F (1, 385) $= 15.69$, $p < 0.001$, partial $\eta^2 = 0.04$) and post-exposure attitude were found to have a significant effect on purchase intention (F (1, 385) $= 249.65$, $p < 0.001$, partial $\eta^2 = 0.39$), lending support to *H3* (see Table III).

Analysis of covariates show that physical attractiveness had a significant main effect on perceived trustworthiness (F (1, 389) $= 24.20$, $p < 0.001$, partial $\eta^2 = 0.06$, see Table IV), but not on post-exposure attitude or purchase intention. The interaction effect between physical attractiveness and trustworthiness on post-exposure attitude and purchase intention was not statistically significant (see Tables II-III).

Discussion

This study is the first to apply social distance theory to explain cross-cultural trust in a digital marketing context. In doing so, the current research tested an updated social distance scale to better reflect contemporary social relations and expanded the application of social distance theory from a sociological inquiry to marketing and digital communication research. Findings indicate that even though perceived social distance is relatively low between Caucasian participants and the other racial/ethnic groups, their perceived social distance toward individuals with a Caucasian identity (in-group members) remains significantly smaller than that toward individuals with an Asian or an African-American identity.

Consistent with our assumption, the social-contact dimension of the social distance construct introduced in the current study has a significant effect on source trustworthiness. By comparison, the social-relationship dimension of the social distance concept is irrelevant to perceived source trustworthiness. This suggests that study participants perceive the reviewer with whom they are more comfortable to interact and share common social spaces to be more trustworthy. But whether participants feel comfortable with establishing a social relationship with an individual from another ethnicity is irrelevant to how they assess the trustworthiness of a consumer reviewer.

Although review valence has been studied in previous research on eWOM, no consensus has emerged regarding the persuasive effect of positive vs negative reviews. This study found that a positive review enhanced reviewer trustworthiness more than a negative review. It is possible that the positive reviewer is seen as more fair and believable. By contrast, it is likely that the negative reviewer is viewed as being overly critical – due to a potential bad experience – that could occasionally happen to any hotel guest. These findings are consistent with previous research, which suggests that positive statements could be seen as more valuable and helpful in terms of suggesting further consideration for the product (Forman *et al.*, 2008; Li and Zhan, 2011; Mudambi and Schuff, 2010). They also confirm past findings, which reveal that review valence has an influence on consumer brand attitude and sales of books (Chevalier and Mayzlin, 2006).

Findings also show that participants had the most negative brand attitude when encountering a negative review posted by the African-American reviewer, followed by the

Asian-American reviewer and then the Caucasian reviewer. Participants also had the most positive brand attitude after reading a positive review posted by the Asian-American reviewer, followed by the African-American reviewer and the Caucasian reviewer, in that order. These results are similar to those associated with perceived reviewer trustworthiness reported above, which ranks the African-American reviewer as more trustworthy than the Asian-American reviewer and the Caucasian reviewer. This suggests that even as the Caucasian participants perceived lager social distance between themselves and the two ethnic groups, the two ethnic reviewers were still able to significantly influence participant attitude toward the product.

Perceived physical attractiveness of consumer reviewers has a significant influence on perceived reviewer trustworthiness, as the African-American reviewer was rated more physically attractive than the Caucasian and the Asian-American reviewers (in that order). The significant role of physical attractiveness reported here is compatible with previous literature on the relations between perceived physical attractiveness and source credibility (Ohanian, 1990). Past research shows that Asian-American males are perceived to be physically unattractive and asexual (Rhodes *et al.*, 2005); they are often portrayed with the "model minority" stereotypes in the media, including nerdy and studious as well as lacking in leadership ability or masculinity (Shah, 2003; Shek, 2007; Shim, 1998; Kawai, 2005). In spite of these unflattering images of Asian-American males, Caucasian participants still rated the Asian-American reviewer as being more trustworthy than the Caucasian reviewer.

Turing to brand attitude and purchase intention, pre-exposure brand attitude significantly predicted post-exposure brand attitude; pre-exposure and post-exposure brand attitude also emerged as significant predictors of post-exposure purchase intention. Source trustworthiness was found to be significantly related to post-exposure brand attitude, but not purchase intention, confirming previous work (Hansen *et al.*, 2014; Li and Zhan, 2011). The same was not true for either social distance or reviewers' physical attractiveness. Failure to find a significant effect of these variables on purchase intention could perhaps be explained by potential moderators that were not measured in the study; these moderators could include preference for or loyalty toward other hotel brands, cost consideration and the like (Chiang and Jang, 2007). As most college students have yet to make more independent travel and hotel-booking decisions on their own, their lack of experience in selecting hotel accommodations might also have contributed to this result (Ricci and Wietsma, 2006).

Allen's (1975) early research shows that white participants who scored low on prejudice toward African-Americans rated a list of black public figures more favorably than white public figures, on average. As this millennial generation experiences a fair amount of cultural diversity in their daily life, either through interpersonal contact or popular culture (e.g. hip hop music), they may be less concerned about the ethnicity of a message source. This is consistent with research suggesting that millennials express relatively progressive positions on such issues as acceptance of interracial dating and marriage (Pew Research, 2010). On the other hand, these findings also contradict previous studies that indicate an individual's tendency to be persuaded by an in-group member more than by an out-group member (Mackie, 1986) – and to perceive greater trustworthiness in the source that shares the same ethnic identity – than a source that does not (Martin *et al.*, 2004).

An additional explanation for these complex results could be a "black sheep effect" (Marques *et al.*, 1988; Harmon-Kizer, 2016). That is, people judge a likable in-group member more positively than a likable out-group member, but they judge a dislikeable in-group member more negatively than a dislikeable out-group member. This is similar to the outcome of subjective representation of in-group normative pressure (Marques and Paez, 1994),

where individuals might hold a higher standard for their in-group peers; but when that expectation of meeting a higher standard is violated, then an in-group member will be more severely judged than an out-group member in a comparable situation. Therefore, a persuasive message from a non-prototypical source that shares the same ethnic identity with a receiver could fare worse than the source with a different ethnic identity. Moreover, according to past research on social identity, persuasion effect of an in-group is also contingent on the contextual salience of group identity (Tajfel and Turner, 1986). In this study, providing a consumer review for a hotel may not activate a strong in-group vs out-group differentiation based on ethnicity, but may induce social identification in other dimensions (e.g. age or socio-economic status).

As mentioned above, perceived social distance between the Caucasian study participants and the two out-groups was relatively small. As most college students have plenty of opportunities to interact with ethnic minority peers and faculty on campus, they may not perceive a great social-contact distance toward individuals with an Asian or African-American identity. However, the findings from a national survey reveal that there appears to be a highly noticeable social-relationship distance between Caucasians and other ethnic groups. Using 100 social network friends as the basis for comparison (Public Religion Research Institute, 2014), the study shows that while an average white American has 91 white friends, she/he has one friend each who is black, Asian, Hispanic, mixed-raced or of other races. This empirical evidence thus further confirms how Caucasian participants perceive a greater perceived social distance – between themselves and their non-white counterparts – and feel more comfortable in making social contacts than entering a more intimate social relationship with them. It also showcases the complicated phenomenon of race, social identity, social distance and consumer behavior.

Limitations and implications
There are several limitations in this study. First, the manipulation failed to keep physical attractiveness level of an "average-looking" male spokesperson equal across three different races; other experimental studies may yield a different result. Second, the mock web page did not show the reviewer's credibility status as a badge next to his profile nor additional reviews posted by other reviewers, as they would have normally appeared on the Yelp site. The absence of these features might influence participant evaluation of the mock reviews. Third, using Caucasian participants as the baseline for analysis narrowed the scope of our study. As the first study on this subject, this approach allowed for a more succinct explanation of a highly complex phenomenon. Fourth, the study focused on three racial groups whose facial features are strongly tied to their ethnic identity; hence a major ethnic group, the Hispanics/Latinos, was not included. Lastly, the generalizability of current study findings primarily applies to college students instead of the general adult population as a whole.

Implications for research
The current study extended and updated the original social distance scale from Bogardus (1925), by broadening its empirical relevance to multiculturalism in a digital marketing context. As social-contact factor was found to play a significant role in explaining consumer behavior but not the social-relationship factor, these finding provide a new and potentially significant theoretical contribution to the market research literature. These results flow logically from the homophily dynamics outlined above, as most consumers will likely make social contact with individuals of a different ethnic identity in various social circumstances. However, engaging in a more intimate social relationship with individuals of a different ethnic identity is primarily a matter of personal choice.

The "social-contact" factor introduced in this study could play a significant role in influencing consumer perception of multicultural message source credibility and likability. For example, social media interactions between consumers and popular public figures (e.g. popular cultural icons or athletes) from diverse racial/ethnic groups – albeit superficial and likely parasocial in nature – could be instrumental in helping to reduce perceived social distance between multiracial social groups. Since the existing literature has largely focused on applying the ethnic identity concept to explain consumer preferences and behaviors, the present study's treatment of perceived social distance between a message source and message receiver could provide an important theoretical consideration for a wide variety of multicultural marketing research settings and practice.

Implications for practice
As evidenced by the study findings, consumer ability to trust the judgment and hence the product recommendations made by the ethnic reviewers can influence their attitude toward the product reviewed by these reviewers. In particular, the reviews posted by the African and Asian-American reviewers each significantly impacted how consumers evaluated their liking or disliking of the product in question. Compared to past research, these results imply a shift in interracial relations, which extends to the eWOM marketing context. These findings, by no means suggest a post-racial society, where an "average-looking" consumer reviewer from a racially incongruent background will necessarily be more effective than a racially congruent consumer reviewer.

College campuses represent a unique microcosm in society, one in which cultural diversity is systematically cultivated. As such, the social distance that study participants perceived between different racial/ethnic groups could help foretell how multiculturalism may function in society. Future studies could consider testing the validity of social distance construct in relation to how multicultural digital information sources are perceived and evaluated – as well as how they might affect individuals' beliefs, attitudes and behaviors – in a wide variety of online venues, including online social networks. As social distance is a relatively fluid concept, empirical field research in eWOM is needed to validate the current study findings. The validation of the social distance construct in a digital marketing context could also have strong implications for other digital social-interaction settings, such as social marketing and risk communication, among others.

References

Al-Debei, M., Akroush, M.N. and Ashouri, M.I. (2015), "Consumer attitudes towards online shopping", *Internet Research*, Vol. 25 No. 5, pp. 707-733.

Allen, B.P. (1975), "Social distance and admiration reactions of 'unprejudiced' Whites", *Journal of Personality*, Vol. 43 No. 4, pp. 709-726.

Allport, G.W. (1954), *The Nature of Prejudice*, Addison-Wesley, Boston, MA.

Ayeh, J.K., Au, N. and Law, R. (2013), "Do we believe in TripAdvisor? Examining credibility perceptions and online travelers' attitude toward using user-generated content", *Journal of Travel Research*, Vol. 52 No. 4, pp. 437-452.

Birrell, S. (1989), "Racial relations theories and sport: suggestions for a more critical analysis", *Sociology of Sport Journal*, Vol. 6 No. 3, pp. 212-227.

Bogardus, E.S. (1925), "Social distance and its origins", *Journal of Applied Sociology*, Vol. 9 No. 2, pp. 216-226.

Cano, C.R. and Ortinau, D.J. (2012), "Digging for 'Spanish Gold': how to connect with Hispanic consumers", *Journal of Advertising Research*, Vol. 52 No. 3, pp. 322-332.

Casaló, L.V., Flavián, C., Guinalíu, M. and Ekinci, Y. (2015), "Avoiding the dark side of positive online consumer reviews: enhancing reviews' usefulness for high risk-averse travelers", *Journal of Business Research*, Vol. 68 No. 9, pp. 1829-1835.

Chatterjee, P. (2001), "Online reviews: do consumers use them?", in Gilly, M.C. and Myers-Levy, J. (Eds), *Advances in Consumer Research 2001 Proceedings*, Association for Consumer Research, Provo, UT, pp. 129-133, available at: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=900158 (accessed April 11, 2015).

Chen, Y. and Xie, J. (2008), "Online consumer review: word-of-mouth as a new element of marketing communication mix", *Management Science*, Vol. 54 No. 3, pp. 477-491.

Cheng, Y. and Ho, H. (2015), "Social influence's impact on reader perceptions of online reviews", *Journal of Business Research*, Vol. 68 No. 4, pp. 883-887.

Chern, C.C., Wei, C.P., Shen, F.Y. and Fan, Y.N. (2015), "A sales forecasting model for consumer products based on the influence of online word-of-mouth", *Information Systems and e-Business Management*, Vol. 13 No. 3, pp. 445-473.

Chevalier, J.A. and Mayzlin, D. (2006), "The effect of word of mouth on sales: online book reviews", *Journal of Marketing Research*, Vol. 43 No. 3, pp. 345-354.

Chiang, C.F. and Jang, S.S. (2007), "The effects of perceived price and brand image on value and purchase intention: leisure travelers' attitudes toward online hotel booking", *Journal of Hospitality and Leisure Marketing*, Vol. 15 No. 3, pp. 49-69.

Chih, W.H., Wang, K.Y., Hsu, L.C. and Huang, S.C. (2013), "Investigating electronic word-of-mouth effects on online discussion forums: the role of perceived positive electronic word-of-mouth review credibility", *Cyberpsychology, Behavior, and Social Networking*, Vol. 16 No. 9, pp. 658-668.

Craig, C.S., Greene, W.H. and Versaci, A. (2015), "E-word of mouth: early predictor of audience engagement – how pre-release 'e-WOM' drives box-office outcomes of movies", *Journal of Advertising Research*, Vol. 55 No. 1, pp. 62-72.

Duan, W., Gu, B. and Whinston, A.B. (2008), "Do online reviews matter? An empirical investigation of panel data", *Decision Support Systems*, Vol. 45 No. 4, pp. 1007-1016.

Elias, T., Appiah, O. and Gong, L. (2011), "Effects of strength of ethnic identity and product presenter race on black consumer attitudes: a multiple-group model approach", *Journal of Interactive Advertising*, Vol. 11 No. 2, pp. 13-29.

Filieri, R. (2015), "What makes online reviews helpful? A diagnosticity-adoption framework to explain informational and normative influences in e-WOM", *Journal of Business Research*, Vol. 68 No. 6, pp. 1261-1270.

Flanagin, A.J. and Metzger, M.J. (2000), "Perceptions of internet information credibility", *Journalism and Mass Communication Quarterly*, Vol. 77 No. 3, pp. 515-540.

Forman, C., Ghose, A. and Wiesenfeld, B. (2008), "Examining the relationship between reviews and sales: the role of reviewer identity disclosure in electronic markets", *Information Systems Research*, Vol. 19 No. 3, pp. 291-313.

Ghose, A. and Ipeirotis, P. (2006), "Designing ranking systems for consumer reviews: the impact of review subjectivity on product sales and review quality", *Proceedings of the 16th Annual Workshop on Information Technology and Systems*, pp. 303-310, available at: www.researchgate.net/profile/Panos_Ipeirotis/publication/228618643_Designing_ranking_systems_for_consumer_reviews_The_impact_of_review_subjectivity_on_product_sales_and_review_quality/links/00b7d51b09458dbae6000000.pdf (accessed April 11, 2015).

Hagendoorn, L. (1995), "Intergroup biases in multiple group systems: the perception of ethnic hierarchies", *European Review of Psychology*, Vol. 6 No. 1, pp. 199-228.

Hansen, S.S., Lee, J.K. and Lee, S. (2014), "Consumer-generated ads on YouTube: Impacts of source credibility and need for cognition on attitudes, interactive behaviors, and Ewom", *Journal of Electronic Commerce Research*, Vol. 15 No. 3, pp. 254-266.

Harmon-Kizer, T. (2016), "Identity distancing and targeted advertisements: the black sheep effect", *Journal of Promotion Management*, Vol. 22 No. 3, pp. 321-348.

Humphreys, J.M. (2013), "The Multicultural Economy 2013", The University of Georgia, The Selig Center for Economic Growth, Athens, GA, available at: http://latinodonorcollaborative.org/wp-content/uploads/2015/12/Multicultural-Economy-2013-SELIG-Center.pdf (accessed April 11, 2015).

Jeong, H. and Koo, D. (2015), "Combined effects of valence and attributes of e-WOM on consumer judgment for message and product", *Internet Research*, Vol. 25 No. 1, pp. 2-29.

Jeong, H., Cho, S., Lee, M. and Sputra, E. (2014), "Race of athlete-spokesperson and implicit and explicit responses to advertising", *Social Behavior and Personality: An International Journal*, Vol. 42 No. 4, pp. 655-671.

Jerabek, I. and DeMan, A.F. (1994), "Social distance among Caucasians-Canadians and Asian, Latin-American and eastern European immigrants in Quebec: a two-part study", *Social Behavior and Personality*, Vol. 22 No. 3, pp. 297-304.

Kawai, Y. (2005), "Stereotyping Asian Americans: the dialectic of the model minority and the Yellow Peril", *The Howard Journal of Communications*, Vol. 16 No. 2, pp. 109-130.

Ketelaar, P.E., Willemsen, L.M., Sleven, L. and Kerkhof, P. (2015), "The good, the bad, and the expert: how consumer expertise affects review valence effects on purchase intentions in online product reviews", *Journal of Computer-Mediated Communication*, Vol. 20 No. 6, pp. 649-666.

Lee, S. (2009), "How do online reviews affect purchasing intention?", *African Journal of Business Management*, Vol. 3 No. 10, pp. 576-581.

Li, J. and Zhan, L. (2011), "Online persuasion: how the written word drives WOM evidence from consumer-generated product reviews", *Journal of Advertising Research*, Vol. 51 No. 1, pp. 239-257.

Liang, Y., DeAngelis, B.N., Clare, D.D., Dorros, S.M. and Levine, T.R. (2014), "Message characteristics in online product reviews and consumer ratings of helpfulness", *Southern Communication Journal*, Vol. 79 No. 5, pp. 468-483.

Liviatan, I., Trope, Y. and Liberman, N. (2008), "Interpersonal similarity as a social distance dimension: implications for perception of others' actions", *Journal of Experimental Social Psychology*, Vol. 44 No. 5, pp. 1256-1269.

Luo, C., Luo, X.R., Schatzberg, L. and Sia, C.L. (2013), "Impact of informational factors on online recommendation credibility: the moderating role of source credibility", *Decision Support Systems*, Vol. 56, December, pp. 1-524.

Mackie, D.M. (1986), "Social identification effects in group polarization", *Journal of Personality and Social Psychology*, Vol. 50 No. 4, pp. 720-728.

Marques, J.M. and Paez, D. (1994), "The 'Black sheep effect': social categorization, rejection of ingroup deviates, and perception of group variability", *European Review of Social Psychology*, Vol. 5 No. 1, pp. 37-68.

Marques, J.M., Yzerbyt, V.Y. and Leyens, J.P. (1988), "The 'Black sheep effect': extremity of judgments towards ingroup members as a function of group identification", *European Journal of Social Psychology*, Vol. 18 No. 1, pp. 1-16.

Martin, B.A.S., Kwai-Choi Lee, C. and Feng, Y. (2004), "The influence of ad model ethnicity and self-referencing on attitudes: evidence from New Zealand", *Journal of Advertising*, Vol. 33 No. 4, pp. 27-37.

Moon, S., Park, Y. and Kim, Y.S. (2014), "The impact of text product reviews on sales", *European Journal of Marketing*, Vol. 48 Nos 11/12, pp. 2176-2197.

Morrison, K. (2015), "Report: User reviews have a powerful impact online and offline", *Ad Week*, July 16, available at: www.adweek.com/socialtimes/report-user-reviews-have-a-powerful-impact-online-and-offline/623537 (accessed March 5, 2016).

Mudambi, S.M. and Schuff, D. (2010), "What makes a helpful online review? A study of customer reviews on Amazon.com", *MIS Quarterly*, Vol. 34 No. 1, pp. 185-200.

Muraskin, J. and Iverson, M.A. (1958), "Social expectancy as a function of judged social distance", *Journal of Social Psychology*, Vol. 48 No. 1, pp. 11-14.

On Campus Research (2012), "Behavior and trends of student consumers", National Association of Campus Stores, Oberlin, OH, available at: www.nacs.org/email/html/OnCampusResearch/SPR-0 80-03-12_Client%20Newsletter.pdf (accessed January 5, 2016).

Ohanian, R. (1990), "Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness", *Journal of Advertising*, Vol. 19 No. 3, pp. 39-52.

Owusu, R.A., Mutshinda, C.M., Antai, I., Dadzie, K.Q. and Winston, E.M. (2016), "Which UGC features drive web purchase intent? A spike-and-slab Bayesian variable selection approach", *Internet Research*, Vol. 26 No. 1, pp. 22-37.

Park, D.H., Lee, J. and Han, I. (2007), "The effect of on-line consumer reviews on consumer purchasing intention: the moderating role of involvement", *International Journal of Electronic Commerce*, Vol. 11 No. 4, pp. 125-148.

Park, S.B. and Park, D.H. (2013), "The effect of low versus high variance in product reviews on product evaluation", *Psychology and Marketing*, Vol. 30 No. 7, pp. 543-554.

Parrillo, V. and Donoghue, C. (2013), "The national social distance study: ten years later", *Sociological Forum*, Vol. 28 No. 3, pp. 597-614.

Pew Research Center (2010), "Almost all millennials accept interracial dating and marriage", Pew Research Center, Washington, DC, available at: www.pewresearch.org/2010/02/01/almost-all-millennials-accept-interracial-dating-and-marriage/ (accessed April 11, 2015)

Platow, M.J., Mills, D. and Morrison, D. (2000), "The effects of social context, source fairness, and perceived self-source similarity on social influence: a self-categorisation analysis", *European Journal of Social Psychology*, Vol. 30 No. 1, pp. 69-81.

Pookulangara, S. and Koesler, K. (2011), "Cultural influence on consumers' usage of social networks and its' impact on online purchase intentions", *Journal of Retailing and Consumer Services*, Vol. 18 No. 4, pp. 348-354.

Public Religion Research Institute (2014), "Analysis: race and Americans' social networks", Public Religion Research Institute, Washington, DC, available at: http://publicreligion.org/research/20 14/08/analysis-social-network/#.VjUdzmD5OS0 (accessed April 11, 2015).

Racherla, P., Mandviwalla, M. and Connolly, D.J. (2012), "Factors affecting consumers' trust in online product reviews", *Journal of Consumer Behaviour*, Vol. 11 No. 2, pp. 94-104.

Randall, N.H. and Delbridge, S. (2005), "Perceptions of social distance in an ethnically fluid community", *Sociological Spectrum*, Vol. 25 No. 1, pp. 103-122.

Rhodes, G., Lee, K., Palermo, R., Weiss, M., Yoshikawa, S., Clissa, P. and Jeffery, L. (2005), "Attractiveness of own-race, other-race, and mixed-race faces", *Perception*, Vol. 34 No. 3, pp. 319-340.

Ricci, F. and Wietsma, R.T. (2006), "Product reviews in travel decision making", in Hitz, M., Sigala, M. and Murphy, J. (Eds), *Information and Communication Technologies in Tourism 2006 Proceedings of the International Conference in Lausanne, Switzerland, 2006*, Springer-Verlag, Vienna, pp. 296-307, available at: http://link.springer.com/chapter/10.1007/3-211-32710-X_41 (accessed April 11, 2015).

Roberts, J.J. (2015), "Amazon sues people who charge $5 for fake reviews", *Fortune*, available at: https://finance.yahoo.com/news/amazon-sues-people-charge-5-130543207.html# (accessed April 11, 2015).

Sen, S. and Lerman, D. (2007), "Why are you telling me this? An examination into negative consumer reviews on the web", *Journal of Interactive Marketing*, Vol. 21 No. 4, pp. 76-94.

Schindler, R.M. and Bickart, B. (2012), "Perceived helpfulness of online consumer reviews: the role of message content and style", *Journal of Consumer Behaviour*, Vol. 11 No. 3, pp. 234-243.

Schlosser, A.E. (2011), "Can including pros and cons increase the helpfulness and persuasiveness of online reviews? The interactive effects of ratings and arguments", *Journal of Consumer Psychology*, Vol. 21 No. 3, pp. 226-239.

Shah, H. (2003), "'Asian culture' and Asian American identities in the television and film industries of the United States", *Studies in Media & Information Literacy Education*, Vol. 3 No. 3, pp. 17-35.

Shek, Y.L. (2007), "Asian American masculinity: a review of the literature", *The Journal of Men's Studies*, Vol. 1 No. 3, pp. 379-391.

Shim, D. (1998), "From yellow peril through model minority to renewed yellow peril", *Journal of Communication Inquiry*, Vol. 22 No. 4, pp. 385-409.

Sierra, J., Hyman, M. and Heiser, R. (2012), "Ethnic identity in advertising: a review and meta-analysis", *Journal of Promotion Management*, Vol. 18 No. 4, pp. 489-513.

Smith, D., Menon, S. and Sivakumar, K. (2005), "Online peer and editorial recommendations, trust, and choice in virtual markets", *Journal of Interactive Marketing*, Vol. 19 No. 3, pp. 15-37.

Sparks, B.A. and Browning, V. (2011), "The impact of online reviews on hotel booking intentions and perception of trust", *Tourism Management*, Vol. 32 No. 6, pp. 1310-1323.

Strully, K. (2014), "Racially and ethnically diverse schools and adolescent romantic relationships", *American Journal of Sociology*, Vol. 120 No. 3, pp. 750-797.

Tajfel, H. (1981), *Human Groups and Social Categories*, University Press, Cambridge, MA.

Tajfel, H. and Turner, J.C. (1986), "The social identity theory of intergroup behavior", in Worchel, S. (Ed.), *Psychology of Intergroup Relations*, 2nd ed., Vol. 2, Nelson-Hall, Chicago, IL.

Tsao, W.C., Hsieh, M.T., Shih, L.W. and Lin, T.M. (2015), "Compliance with eWOM: the influence of hotel reviews on booking intention from the perspective of consumer conformity", *International Journal of Hospitality Management*, Vol. 46, pp. 1-214.

The Harris Poll (2015), "2015 Harris Poll: travel industry brand of the year awardees stand to win big in the 2015 summer travel season", EquiTrend, Rochester, New York, NY, available at: www.theharrispoll.com/business/2015-Harris-Poll-EquiTrend.html (accessed February 1, 2016).

Turner, J.C. (1987), *Rediscovering the Social Group: A Self-Categorization Theory*, Basil Blackwell, Cambridge, MA.

Wang, M., Lu, Q., Chi, R.T. and Shi, W. (2015), "How word-of-mouth moderates room price and hotel stars for online hotel booking: an empirical investigation with Expedia data", *Journal of Electronic Commerce Research*, Vol. 16 No. 1, pp. 72-80.

Wathen, C.N. and Burkell, J. (2002), "Believe it or not: factors influencing credibility on the web", *Journal of the American Society for Information Science and Technology*, Vol. 53 No. 2, pp. 134-144.

Weaver, C.N. (2012), "Prejudice in the lives of Asian Americans", *Journal of Applied Social Psychology*, Vol. 42 No. 8, pp. 1847-1869.

Whittler, T.E. (1989), "Viewers' processing of actor's race and message claims in advertising stimuli", *Psychology and Marketing*, Vol. 6 No. 4, pp. 287-309.

Whittler, T.E. (1991), "The effects of actors' race in commercial advertising: review and extension", *Journal of Advertising*, Vol. 20 No. 1, pp. 54-60.

Xie, H.J., Miao, L., Kuo, P. and Lee, B. (2011), "Consumers' responses to ambivalent online hotel reviews: the role of perceived source credibility and pre-decisional disposition", *International Journal of Hospitality Management*, Vol. 30 No. 1, pp. 178-183.

Xu, X. (2014), "The influence of the message source's national identity on Chinese international students' attitudes", MA thesis, Michigan State University, East Lansing, MI, available at: http://ezproxy.lib.uconn.edu/login?url=http://search.proquest.com/docview/1529430570?accountid=14518 (accessed April 11, 2015).

Zhang, J.Q., Craciun, G. and Shin, D. (2010), "When does electronic word-of-mouth matter? A study of product reviews", *Journal of Business Research*, Vol. 63 No. 12, pp. 1336-1341.

Further reading

Chang, W. (1993), "M. butterfly: passivity, deviousness, and the invisibility of the Asian-American male", in Revilla, L.A., Hune, S. and Nomura, G.M. (Eds), *Bearing Dreams, Shaping Visions: Asian Pacific American Perspectives*, Washington State University Press, Pullman, WA, pp. 181-184.

Lee, K.Y. and Yang, S. (2015), "The role of online product reviews on information adoption of new product development professionals", *Internet Research*, Vol. 25 No. 3, pp. 435-452.

Metzger, M.J., Flanagin, A.J. and Medders, R.B. (2010), "Social and heuristic approaches to credibility evaluation online", *Journal of Communication*, Vol. 60 No. 3, pp. 413-439.

Wang, X. and Cooper-Chen, A. (2010), "Gendered stereotypes of Asians portrayed on the websites of US higher education institutions", *Visual Communication Quarterly*, Vol. 17 No. 2, pp. 77-90.

Weathers, D., Swain, S.D. and Grover, V. (2015), "Can online product reviews be more helpful? Examining characteristics of information content by product type", *Decision Support Systems*, Vol. 79, November, pp. 1-208.

Corresponding author
Carolyn A. Lin can be contacted at: carolyn.lin@uconn.edu