Social Endorsement Effects on Message Processing: Cross-Cultural Analysis

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Abstract

*T*his study examines cross-cultural variations in the effects of social endorsement on online message processing. A 2 x 3 between-subjects experiment (N = 567) was conducted, in which country (Korea vs. U.S.) and social endorsement level (none vs. low vs. high) were manipulated. Results suggest the level of social endorsement affects perceived quality of message in the U.S., but not in Korea. Results also show that Korean subjects are not dominantly collectivistic, as many scholars have assumed. Rather, they display a bi-cultural tendency. The U.S. subjects demonstrate dominantly independent self-construal, but report higher interdependent self-construal scores than Korean subjects. The findings also reveal that independent and interdependent self-construal may influence the direction and magnitude of social endorsement effects on perceived quality of message to some extent, albeit not as a primary factor. Theoretical and practical implications are discussed.

Keywords: Social Endorsement, Online Messaging, Cross-Cultural Communication

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Introduction

Today, message consumption is a social experience. The advent and development of the Internet has enabled people to have direct and real-time information of others' reactions to media messages. From online advertising to news articles, social endorsement tools, such as like or recommend, provide message recipients with information of what others think about the message.

A growing body of research has discussed how this change affects message processing (Knobloch-Westerwick et al., 2005; Messing & Westwood, 2012; Metzger et al., 2010; Sundar & Nass, 2001). Although these studies have revealed the mechanism of social endorsement effects, the discussion has largely been confined to a single country's borders - mainly the U.S. Thus we are left the following question: Do social endorsements have the same effect on message processing across cultures or countries?

To answer this question, this study employs a cross-cultural approach in investigating how the exposure to other users' endorsements alters the way people perceive online messages. Using a 2 x 3 between-subjects experiment (N = 567) in which country (Korea vs. U.S.) and social endorsement level (none vs. low vs. high) were manipulated, this study explores the interplay between social endorsement and audiences' cultural orientation. Among several dimensions of cultural orientation (Hofstede, 2001), this study focuses on collectivism and individualism.

Along with the increasing globalization of message production and dissemination, comprehensive examination of social endorsement effects in the context of cultural orientation will be a meaningful addition to our understanding of message processing in the digital era. Given that user participation in online communication activities is an international phenomenon, stretching the scope of audience trait analysis beyond the domestic level will provide us with important insights into effective communications strategies in the global era.

Literature Review

Social Endorsement Effect

Defined as an aggregate of users' positive reaction to online content, social endorsement is one of the most prominent features of the new media environment. The Internet has provided users with easy and accessible communication channels through which they can share opinions about media messages (Boczkowski, 2004; Thorson, 2008). For instance, people can share their reviews regarding a new product sold in online shopping mall. After reading a news article, people often press a recommend or like button to express their positive response to the article.

Many scholars have explored how social endorsement influences online message consumption and processing. In a study on how user recommendations affect news selection, Knobloch-Westerwick and her colleagues (2005) found that participants picked more articles if the portal featured explicit recommendations, and stronger explicit recommendations instigated longer exposure to associated articles. Other scholars have also shown that people utilize other users' reaction in selecting digital media (Salganik, Dodds, & Watts, 2006) as well as when selecting and endorsing articles that friends endorse (Lerman, 2007).

If knowing how the endorsements of others' influences individual expectations and selection of messages, the knowledge may also affect the way people perceive and evaluate the message. Research examining the actual consequences of message consumption - what happens after people read media messages with social endorsement - is starting to grow. Westerman, Spence, and Van Der Heide (2012) showed the indication of popularity affects the audience's perception of content credibility. Stavrositu and Kim (2014) also found that social endorsements, displayed alongside online news stories, shape users' perceptions of the content and its influence.

The Elaboration Likelihood Model (ELM) provides a theoretical explanation for how other users' endorsements

affect our perceptions of message content. The basic premise of the ELM is attitude change depends on the likelihood an issue or argument will be elaborated upon (Petty & Cacioppo, 1981). The ELM posits there are two routes to attitude change: when motivation and ability to process a persuasive message is high, persuasion is likely to occur through careful and elaborated processing of information (central route). In contrast, when motivation and ability to process the message is low, people tend to rely on simple cues to make a decision without complex cognitive efforts (peripheral route) (Petty & Cacioppo, 1986).

The ELM has been used as a general model for understanding message processing (Cho et al., 2006; Igartua & Cheng, 2009; Knobloch-Westerwick et al., 2005; Metzger et al., 2010; Perse, 2001; Sundar et al., 2007). Knobloch-Westerwick et al. (2005) found that an online news cue, such as implicit and explicit recommendations from other users affect information choices. In a similar vein, Sundar et al. (2007) investigated how various news cues, such as (a) the name of the primary source, (b) the recency of the story, and (c) the number of related articles published on the same topic, influence online news consumers' perception of news stories. A more recent study by Metzger, Flanagin, and Medders (2010) also suggested most online users rely on the news cue provided by other users to assess the credibility of the information. Extending this line of research, this study attempts to find the relationship between social endorsement - a cue dictated by other users - and perceived message quality; leading to the first hypothesis:

H1: The more endorsements a news article receives (none vs. low vs. high), the higher the perception of content quality, by the subjects, will be.

Cultural Orientation: Individualism vs. Collectivism

A rich body of research has demonstrated the characteristics of the audience play a role in determining media effects (Mastro, 2009; Reid, Giles, & Harwood, 2005). This study focuses on cultural orientation as an important audience trait. In 1980, the Dutch cultural anthropologist Geert Hofstede theorized that national cultures vary along several dimensions. Based on interviews with IBM employees in 53 countries, Hofstede (2001) identified five cultural dimensions (power distance, individualism vs. collectivism, femininity vs. masculinity, uncertainty avoidance, and long vs. short-term orientation) and rated countries for each dimension.

Among the five dimensions that Hofstede proposed, the individualism-collectivism continuum has been recognized as the central dimension. Studies on cultural values and orientation have shown that countries have different tendencies toward individualism and collectivism (Hofstede, 2001; Singelis & Brown, 1995). A country's position on collectivism and individualism is reflected in how people define their self-images, particularly in terms of "I" or "we" (Hofstede, 2001). Members in an individualistic society tend to prefer a social framework in which individuals' focus is on themselves and their immediate families (Hofstede, 2001). Therefore, individual uniqueness is highly valued in individualistic societies. On the contrary, in a collectivistic society, people tend to prefer a tightly-knit social framework and conceptualize a self as an extension of "us" (Gudykunst et al., 1996). Subsequently, community cohesiveness and congruence are more essential values than individual uniqueness in collectivistic societies.

The constructs of individualism and collectivism have been extensively discussed in the cultural psychology literature. Different studies have recognized them as an important foundation to explain differences between cultural groups in terms of communication (Gudykunst et al., 1992), personal motivation (Phalet & Claeys, 1993), perceptions of in-group vs. out-group (Markus & Kitayama, 1991), conflict styles (Trubisky, Ting-Toomey, & Lin, 1991), attribution styles (Morris & Peng, 1994), and consumer behavior (Han & Shavitt, 1994).

Although more than three decades of research have created meaningful discussions in many contexts in the

social sciences, the dichotomous approaches have revealed several limitations. The assumption that individualism and collectivism are contrasting dimensions (Hui & Triandis, 1986) has yielded inaccurate assessments of cultural differences, primarily that each culture is purely individualistic or collectivistic. Furthermore, in the traditional constructs of individualism and collectivism, audiences are treated as mono-cultural individuals who blindly accept and follow the prevailing culture of their countries (Lau-Gesk, 2003).

However, most cultures in fact are a mixture of both individualism and collectivism (Triandis, 1993). Also, people do not homogeneously and blindly represent or replicate the culture of their countries (Singelis et al., 1995). This tendency is particularly salient in many East Asian countries, such as China, Japan, Korea, Hong Kong, and Taiwan. Although being categorized as collectivist cultures in contrast to Western countries, these countries have experienced intense social, political, cultural, and economic changes and subsequent alteration of their cultural orientations. For instance, Zhang (2010) found a generational gap in terms of cultural orientation in Chinese society. The study showed Chinese Generation-X (born between mid-1960s and late 1970s) possesses both individual and collectivist cultural attitudes, unlike their parents' generation that is strongly collectivistic.

Korea vs. U.S.

For a cross-cultural analysis, this study chose two countries - Korea and the U.S. - for the following reasons. First, the two countries offer a unique circumstance to examine online news perception and evaluation. Both Korea and the U.S. are well known as two of the most wired countries in the world. According to the 2014 OECD report, Korea ranked 5th (37.9%) and the U.S. ranked 16th (30.2%) for the share of broadband subscribers to the total population (OECD, 2014). Although specific features vary slightly, all major online news sites in both countries allow readers to endorse news articles.

Second, Korea and the U.S. may not be solely individualistic or collectivistic countries as often have been assumed. For instance, Korea has been a prime example of a collectivistic society. In a 2001 study by Hofstede, Korea was ranked 43rd out of 50 countries in individualism, which has contributed to the perception of it as a highly collectivistic society (Hofstede, 2001). Scholars have found people's behavior is controlled by tacitly shared norms in Korea (Kashima et al., 1995; Rhee, Uleman, & Lee, 1996). Koreans emphasize the concepts of Cheong (emotional connection) and Woori (we-ness) in interpersonal relationships (Cho, Mallinckrodt, & Yune, 2010). Koreans have also been known to possess a strong tendency to identify with an in-group while clearly distinguishing themselves from out-groups (Na & Min, 1998). This collectivistic culture has often been attributed to its ethnic homogeneity as well as the country's long-held respect for Confucian values that highlight hierarchy, seniority, and modesty (Lankov, 2012).

However, often overlooked in these analyses is the rapid Westernization and individualizations Korean society has experienced. As observed by some scholars (Han & Shin, 1999; Park & Kim, 2006), Korean society has undergone extensive economic, social, and political changes, which have led to increasing emphasis on individual freedom and rights. A nationwide survey conducted in 2011 also suggested individualism was on the rise in the Korean society; out of 1,800 respondents, 36.4% prioritized the individual over the organization. Also, 36.8% disagreed with an argument that actions undertaken for the public good should limit or infringe upon their individual rights (LG Research Center, 2011). Such changes in cultural perspective are more evident among young adults (Han & Na, 2004; Hwang & Yang, 2002; Kim, 2009). Growing up under the strong influences of a Westernized education system and pop-culture, young adults in Korea today are experiencing an intensifying tension between emerging individualistic values and the customary values of collectivism (Cho, Mallinckrodt, & Yune, 2010). Particularly, Korean college students, who

have a greater exposure to Western textbooks and seek jobs in multinational corporations than any other group in the society, tend to demonstrate a stronger "me-first" trend than others (Cho & Kim, 2001).

On the contrary, the U.S. was ranked the most individualistic country out of the 50 countries examined (Hofstede, 2001). Hence, many studies testing the individualism-collectivism model were conducted in a U.S. versus collectivistic country (mostly Asian) context, assuming that the U.S. is a predominantly individualistic culture (Buda & Elsayed-Elkhouly, 1998; Grimm et al., 1997).

However, the U.S. is not a rigid or static cultural entity. Different studies showing the variation across individuals, regions, and generations challenge the stereotypic notions of American individualism. For instance, Vandello and Cohen (1999) showed that the Deep South region had strong collectivist tendencies, whereas the Mountain West and Great Plains region had strong individualist tendencies. The degree of individualism could also vary depending on the issue. Based on analysis of the General Social Survey (GSS) data, Celinska (2007) stipulated Americans had an individualistic attitude toward gun ownership but a collectivistic attitude toward gun control.

Scholars also contend American individualism has been often tempered by collectivistic concerns related to family, church, and community (Matsumoto, Kudoh, & Takeuchi, 1996). In addition, collectivistic concerns have been quite strong during wars or equivalent national threats throughout American history. For example, the nationwide flag displays after 9/11 symbolized a strong sense of unity in American society (Bratta, 2009).

Independent vs. Interdependent Self-Construal

Above discussion shows the dichotomy of individualism-collectivism at the national level of analysis is too simplistic and thus could fail to fully explain the complex dynamics of intercultural communication (Young, 2007). To overcome this limitation, this study employs independent and interdependent self-construal, the concepts introduced by Markus and Kitayama (1991) and Singelis (1994).

Self-construal refers to individuals' perceptions and behaviors concerning the relationship between self and others; in particular, the degree to which people see themselves as "separate from others or connected with others" (Markus & Kitayama, 1991, p. 226; Singelis, 1994). Markus and Kitayama (1991) proposed that people with high independent self-construal stress the uniqueness of self and internal attributes, while people with high interdependent self-construal emphasize connectedness and relationships. In this sense, independent and interdependent self-construal are similar to individualism -collectivism in that both are concerned with the relationship of the individual to the collective.

However, independent and interdependent self-construal are different from the concepts of individualism-collectivism in several ways. First, independent and interdependent self-construal focus on the individual level of analysis, while individualism-collectivism observes differences between cultural groups (Singelis, 1994). Given the country-level analysis of individualism and collectivism cannot fully explain individual behavior (Hofstede, 2001), this approach has been acknowledged as an important step forward in cross-cultural communication studies.

Second, unlike individualism-collectivism measures that define cultural groups on a single bipolar dimension, independent and interdependent self-construal are separate dimensions (Singelis, 1994). Therefore, independent self-construal is not necessarily the opposite of interdependent self-construal. This proposition is supported by numerous studies, including Yamaguchi et al.'s (1992) finding that low individualism is not equivalent to collectivism. Ttheir survey in Korea and the U.S., found that individualism items and collectivism items show no correlation (the U.S.) or only moderate negative correlation (Korea). Other scholars also showed some individuals may have two well-developed self-

concepts (Bhawuk & Brislin, 1992; Cross & Markus, 1991; Triandis, 1994). In this vein, measuring individuals' independent and interdependent self-construal can be more useful than measuring individualism-collectivism in examining whether individual variations correspond to the cross-national or cross-cultural differences. This discussion leads to the following research questions:

RQ1: How are Korean and U.S. subjects different in independent-interdependent self-construal?

RQ2: Do Korean and U.S. subjects react differently to social endorsement in their news content evaluation?

As concepts about the relationship between self and others, independent and interdependent self-construal provide an apt context to examine how individual audiences' personal characteristics moderate the effects of social endorsement on message perception. Independent self-construal is the propensity to view personal independence and uniqueness as being more valuable than "the common good." In contrast, people with strong interdependent self-construal are more sensitive to the majority opinion and less likely to diverge from it. Thus, individuals who have strong interdependent self-construal may let social endorsement (popularity indications) guide their message, whereas others who have strong independent self-construal make a more independent assessment of message. Hence, this study proposes the following hypothesis:

H2: The effects of social endorsement on perceived quality of message will vary according to individuals' self-construal, such that

H2a: The effects will be stronger among individuals with stronger interdependent self-construal tendency. H2b: The effects will be weaker among individuals with stronger independent self-construal tendency.

Method

Design and Procedure

This study employs a 2 x 3 between-subjects experimental design. Study subjects in two countries (Korea vs. U.S.) read a news story about a food safety issue, with varying degrees of social endorsement (none vs. low vs. high).

Once subjects clicked a link on the recruitment post, they were directed to the online survey. After providing consent, they were randomly assigned to one of the study conditions: no endorsement (n = 185; Korea = 90, U.S. = 95); low endorsement (n = 185; Korea = 90, U.S. = 95); high endorsement (n = 197; Korea = 90, U.S. = 107).

After reading the stories, participants answered questions about perceived quality of the news story, perceived credibility of social endorsers, perceived role of social endorsements as an indicator of public opinion, tendency to value social endorsements, independent and interdependent self-construal, demographics, and media use. When the questionnaire was completed, participants were debriefed that the news story was based on actual news stories but modified.

I constructed the questionnaire in English first, and it was based on my literature review. Then I translated these measures into Korean. To check the reliability of the translation, a Korean professional living in Seoul, who had received an advanced degree from a U.S. institution, back-translated the Korean questionnaire into English. The translation showed a high level of consistency. A few questions that were back-translated in slightly different ways were re-analyzed and adjusted.

Participants

Data in this experiment were collected in Korea and the U.S. Korean subjects were recruited from an online panel managed by Survey Link, a leading firm known for its expertise in survey sampling. U.S. participants were recruited from Mechanical Turk (MTurk), a crowd-sourcing service by Amazon.com. The data were collected over a one-week period during March 2015.

Participants in Survey Link's online panel agreed to a standard set of rewards for participating in this online experiment. The pre-recruited national panel consists of approximately 300,000 members that mirror the demographic characteristics of the 20-75 year-old

population in Korea. The sample (n=270) was drawn via a quota sampling method to represent four age groups, 20-29 (n=68), 30-39 (n=65), 40-49 (n=64), 50 and over (n=63), and an equal ratio of gender: males (n=132) and females (n=138). The online survey was closed once each subgroup (age and gender) reached its quota, and thus the response rate was not calculated.

U.S. subjects were recruited from Mechanical Turk (MTurk), a crowd-sourcing service by Amazon.com. Subjects were self-selected into the database, and agreed to a standard set of rewards for participating in this online experiment. Although there have been increasing challenges for the external validity of MTurk samples, scholars suggest that MTurk certainly builds a more representative sample than a college student sample (Buhrmester et al., 2011) or an in-person convenience sample (Berinsky et al., 2012). Furthermore, given that MTurk provides a great resource for attracting respondents who are interested in online news (Huff & Tingley, 2015), a MTurk sample does not particularly threaten the external validity of this study.

The data contained 270 completed responses in Korea (Female = 51.1%, Male = 48.9%, M age = 39.28, SD = 11.64), and 297 completed responses in the U.S. (Female= 42.1%, Male = 57.2%, Transgender = .7%, M age = 36.14, SD = 11.58). Table 1 and 2 present additional demographic information of subjects in Korea and the U.S. Chi-square analyses in both countries found no significant differences in the distributions of males and females across study conditions in both countries. There were also no significant differences in subjects' ages, education, and income across conditions.

Stimulus Material

The news stories used in the study were about an E.Coli outbreak. For the purpose of this study, it was important to select an issue that generates moderate personal relevance from participants, but does not instigate polarized opinions. It was also important to find an issue that has a similar level of importance in both Korea and the U.S.

As food safety is mainly about handling, storing and preparing food to prevent infection, it presents a major challenge to both general and at-risk populations. Therefore, issues surrounding food safety have received increasing public attention in the policy, consumer, and media arenas (Meijboom et al., 2006; Sparks & Shepherd, 1994; Worosz et al. 2008). Nevertheless, food safety news is somewhat different from other controversial issues that often generate strongly divided opinions among readers (i.e., gun policy issue, economic inequality issue, same-sex marriage).

A set of pretests with 60 subjects in Korea and 61 subjects in the U.S. was conducted to measure personal relevance to the food safety issue. The pretest subjects were asked to answer the following questions regarding the E.Coli outbreak on a 7-point Likert scale: "This issue is important to me", "This issue is relevant to me", "I'm interested in this issue" (1 = not at all, 7 = very much). Subjects in both countries demonstrated moderate personal relevance to the issue Korea (M = 4.23, SD = 1.38, α = .87; U.S. M = 4.11, SD = 1.86, α = .96). Therefore, the issue was used in the actual experiments.

The food items tied to the E.Coli outbreak were pork belly (Korea) and grilled hamburgers (U.S.). The items were selected based on the common dietary habits in each country. The content of the articles was primarily based on actual news stories with some minor revisions concerning details such as the date, location, and people's names. To increase the authenticity of the language and tone of the stories, an experienced journalist created three different versions of the news stories.

In order to control for the potential effects of using a single version of the news story, three different versions of news stories were employed. Although the core content remained the same, there were slight variations, such as the names of states and people in the stories. Analysis of variance tests found no significant differences in media credibility, news evaluation, and perceived realism

among the three versions of the news story. Responses for the three versions were therefore merged in subsequent analyses.

A web application was designed to replicate a typical online news site in each country. The pretest subjects were randomly assigned to three different layouts of social endorsements display: horizontally under the title, vertically on the left side, and a combination of both. Then subjects were asked to rate the typicality of the news site on a 7-point Likert scale (1 = not typical at all, 7 = very typical). The pretest results in Korea showed social endorsements displayed horizontally under the title as well as vertically on the left side was rated the most typical (M = 5.00, SD = 1.68). The results in the U.S. showed no statistical differences in perceived typicality among the layouts, F (2, 57) = .386, p = .682. Therefore, the level of social endorsements was presented under the title as well as on the left side of the news article.

Independent Variables

Social endorsement. Previous research often used different categories of user participation interchangeably as indicators of social endorsement, without a clear-cut conceptualization. For instance, Knobloch-Westerwick and colleagues (2005) used how many readers have viewed a news article as an indication of implicit social endorsement, and the average rating of the article as an explicit social endorsement. Thorson (2008) posited that the most e-mailed stories list on the front page of the New York Times website works as an indicator of public endorsement and thus helps online users navigate news stories; while Garett (2013) suggested that sharing is a form of endorsement.

However, not all actions by online users are the same in terms of valence or magnitude. For instance, reading a news article is different from emailing, sharing, or recommending the news story. Readers do not need to take any additional action to make an article appear on the "most read" list other than simply reading it. Furthermore, although the number of times a news article was read or e-mailed can represent positive user interest to some extent, it can also say something about users' negative interest in the news article (Das et al., 2007). That is, people not only read the article when they think it is good, but also when they believe the article is controversial or deviant (Sukumaran et al., 2011).

Therefore, to better understand the role of social endorsement in online news perception and evaluation, a clear explication of the concept is needed. The Oxford Online Dictionary defines endorsement as "an act of giving one's public approval or support to someone or something." The Merriam-Webster Online Dictionary defines endorsement as "a statement or action which shows that you support or approve of something or someone." Based on these definitions and previous research, this study defines social endorsement as an aggregate of users' positive reaction to the online news.

Based on this definition of social endorsement, this study operationalizes social endorsement using the number of recommendations (i.e., Facebook "likes"). Rating was not included even though it is an indicator of explicit endorsement, as rating is not a common feature in online news sites currently.

In each condition of the experiment, the news stories were accompanied by no endorsement, low level of endorsements, and high level of endorsements. Replicating Messing and Westwood (2012), the specific numbers indicating a low and high level of endorsements was determined by monitoring the typical number of "recommend" by online news consumers for news stories from the websites of two news organizations in each country. For the Korean condition, websites of the Chosun Ilbo, an online version of a newspaper that has the largest circulation in Korea, and Naver.com, the largest Korean news portal website, were observed over a three-day period. For the U.S. condition, websites of the New York Times, an online version of the newspaper that has the second-largest circulation in the U.S., and Yahoo! News, the largest U.S. news portal website, were observed for the same period.

The observation yielded a different range of numbers for each country. In Korea, even the highest number of recommendations was around 3,000. In contrast, the highest number of recommendation or sharing in the U.S. often went over 10,000. Similarly, a low level of endorsements was generally under ten in Korea, while the range was mainly two digits in the U.S. This gap can be explained by the fact that the two countries have different numbers of people. As of 2014, Korea's population was 51.23 million, making it the 26th-largest country by population. On the contrary, the U.S. population was 318.9 million, making it the third-largest country by population (Worldmeters, 2014).

Given these differences, using the same level of high and low endorsements for both countries could make the stimulus materials look unrealistic. Therefore, this study randomly generated numbers between 0 and 10 (low endorsement) and between 3,000 and 5,000 (high endorsement) for the Korean stimulus materials, while it used randomly generated numbers between 30 and 80 (low endorsement) and between 13,000 and 18,000 (high endorsement) for the U.S. stimulus materials.

Measured Variables

Perceived quality of news. Perceived quality of news was assessed using an 11-item scale, based on Sundar (2000) as well as the common elements of traditional measurement of news quality (Austin & Dong, 1994; Burgoon, Burgoon & Atkin, 1982; Slater & Rouner, 1996; Weaver et al., 1974) (Korea M = 4.49, SD = .78, Cronbach's α = .91; U.S. M = 5.48, SD = 1.08, Cronbach's α = .94). Subjects were asked to evaluate the quality of news stories they read by indicating how well each of the following words described the news story on a 7-point Likert scale ranging from 1 = Described very poorly to 7 = Described very well: accurate, believable, clear, comprehensive, factual, fair, informative, important, objective, well-written, and biased (reverse coded).

Independent self-construal. To measure independent self-construal, participants rated the following 12 statements on a 7-point Likert scale (Singelis, 1994) (M = 4.48, SD = .73, α = 81 in Korea; M = 5.03, SD = .89, α = 86 in the U.S.): "I'd rather say "No" directly, than risk being misunderstood", "Speaking up during a class is not a problem for me", "Having a lively imagination is important to me", "I am comfortable with being singled out for praise or rewards", "I am the same person at home that I am at school", "Being able to take care of myself is a primary concern for me", "I act the same way no matter who I am with", "I feel comfortable using someone's first name soon after I meet them, even when they are much older than I am", "I prefer to be direct and forthright when dealing with people I've just met", "I enjoy being unique and different from others in many respects", "My personal identity, independent of others, is very important to me", "I value being in good health above everything" (1 = Strongly disagree, 7 = Strongly agree). A higher mean score indicates stronger independent self-construal. Interdependent self-construal. To measure interdependent self-construal, subjects rated the following 12 statements on a 7-point Likert scale (Singelis, 1994) (M = 4.46, SD = .75, α = .84 in Korea, M = 4.58, SD = .97, α = .86 in the U.S.): "It is important for me to maintain harmony within my group", "My happiness depends on the happiness of those around me", "I will sacrifice my self-interest for the benefit of the group I am in", "I often have the feeling that my relationships with others are more important than my own accomplishments", "It is important to me to respect decisions made by the group", "I will stay in a group if they need me, even when I'm not happy with the group", "Even when I strongly disagree with group members, I avoid an argument", "I have respect for the authority figures with whom I interact", "I would offer my seat in a bus to my professor", "I respect people who are modest about themselves", "I should take into consideration my parents' advice when making education/career plans", "If

my brother or sister fails, I feel responsible" (1 = Strongly disagree, 7 = Strongly agree). A higher mean score indicates stronger interdependent self-construal.

*Perceived credibility of endorsers as a source.*To measure perceived credibility of endorsers as a source of information, subjects were asked to rate, on a 7-point bipolar scale, how well they think 11 adjectives describe other users as a source of information. The source credibility measure was adapted from Hallahan (1999) and Lee and Sundar (2013): dependable/undependable, honest/dishonest, reliable/unreliable, sincere/insincere, and trustworthy/untrustworthy, not independent/independent, expert/not expert, experienced/inexperienced, knowledge-able/unknowledgeable, qualified/unqualified, and skilled/unskilled (1 = described very poorly, 7 = described very well). Higher mean score indicates higher credibility of other users as a source (M = 3.94, SD = 1.05, α = .96 in Korea; M = 4.68, SD = 1.15, α = .95 in the U.S.).

*Valuing social endorsements.*Two survey items were used to measure the subjects' tendency to value social endorsements in online news consumption. Subjects indicated their tendency to value social endorsements by rating the following statements on a 7-point bipolar scale: "I pay attention to other readers' recommendation or sharing when I read news stories on online news sites", and "I refer to other readers' recommendation or sharing when I evaluate news stories on online news sites" (1 = not at all, 7 = very much). The items were correlated (r = .850, p< .001 in Korea; r = .806, p< .001 in the U.S.). These items were averaged to create an index Valuing Social Endorsements (M = 3.96, SD = 1.41 in Korea; M = 4.25, SD = 1.46 in the U.S.).

Social endorsements reflecting public opinion. A single item measured the subjects' perception of social endorsements as an indicator of public opinion. Subjects were asked to rate, on a 7-point Likert scale, the extent to which they agree with the following statement: "Other readers' recommendation or sharing reflects general public opinion about the issue" (1 = strongly disagree, 7 = strongly agree). (M = 3.77, SD = 1.35 in Korea; M =

4.17, SD = 1.42 in the U.S.).

*Media use.*To measure individual differences in online news consumption, the respondents' reported their frequency of reading: news articles on online news sites (Korea M = 3.43, SD = .99; U.S. M = 3.56, SD = 1.11), of social media use in general (M = 2.72, SD = 1.42. in Korea; M = 3.67, SD = 1.45 in the U.S.), and of reading news articles on social media (Korea M = 2.38, SD = 1.13; U.S. M = 2.73, SD = 1.22) on a scale ranging from "1 = Never" to "6 = More than 2 Hours a day". In Korea, subjects were significantly more likely to spend time reading news on online news sites than social media, t(269) = 13.85, p< .001. Similarly, the U.S. subjects were significantly more likely to spend time on reading news on online news sites than social media, t (296) = 10.01, p< .001. There were no significant differences in any of the media use variables between study conditions in both countries.

Demographics. Basic demographic information such as subjects' age, gender, annual household income, and education were collected.

Results

Manipulation Check

To check the manipulation for social endorsements levels, subjects were asked to recall the level of social endorsements for the news article they read (i.e., There was no recommendation, A small number of people recommended the article, A large number of people recommended the article), with "not sure" as a fourth response option. Their responses were then recoded to reflect the accuracy of recall (1 = correct recall, 0 = not sure, −1 = incorrect recall, M = .41, SD = .64 for no endorsement in Korea, M = .53, SD = .68 for low endorsement in Korea, M = .51, SD = .70 for high endorsement in Korea; M = .43, SD = .67 for no endorsement in the U.S., M = .54, SD = .73 for low endorsement in the U.S., M = .56, SD = .69 for high endorsement in the U.S.). One-sample t tests confirmed that the mean accuracy scores were significantly higher

than zero for every condition in Korea and the U.S. Taken together, I concluded that the manipulations for the social endorsements level performed well and continued with the analysis.

Hypotheses Testing

H1: Hypothesis 1 predicts a news article with higher level of endorsement will be perceived to have higher quality than a news article with lower level of endorsement. The relationship between social endorsement level and perceived news quality can be confounded by a number of factors. For instance, perceived credibility of other users who recommended or shared the article as a source of information could affect the relationship. Other potential confounding factors include individuals' tendency to value social endorsement in news consumption and evaluation, or perceived role of social endorsements as an indicator of public opinion. A series of bivariate analyses found the credibility of endorsers as an information source, tendency to value social endorsements, and perceived role of social endorsements are significantly correlated with perceived quality of news.

Hence, to assess whether different levels of social endorsement lead to different evaluation of the news article once these covariates are controlled for, a series of analysis of covariance (ANCOVA) was conducted. The following assumptions were checked, (a) independence of observations, (b) normal distribution of the dependent variable, (c) homogeneity of variances, (d) linear relationships between the covariates and the dependent variable, and (e) homogeneity of regression slopes. All the assumptions were met.

The results found even after controlling for the covariates, the three endorsement groups (none, low, high) did not differ significantly in perceived quality of news in Korea (Table 3). However, in the U.S., the three endorsement groups (none, low, high) differ significantly in perceived quality of news, after controlling for the covariates (Table 4). Therefore, hypothesis 1 was supported in the U.S., but not in Korea. This result also provides an

answer to research question 2.

Since two of four covariates (valuing social endorsement and perceived role of social endorsement as an indicator of public opinion) did not have confounding effects on the relationship between social endorsement and perceived credibility, only credibility of endorsers and age were used as covariates in the subsequent analyses.

RQ1: To examine how different Korean and U.S. subjects are in their independent-interdependent self-construal scores, a series of ANOVA was conducted first. Results found statistically significant differences between Korean and U.S. subjects in independent self-construal scores. On the contrary, there was no statistically significant difference between two countries in interdependent self-construal scores (Table 5). It is noteworthy that the U.S. subjects demonstrated higher scores for both independent and interdependent self-construal, compared to the Korean subjects.

For further analysis, I analyzed how individual subjects in each country demonstrate overall self-construal, using the abovementioned index, Self Construal (continuous variable). A one-way ANOVA found that subjects in Korea and the U.S. demonstrate different patterns of self-construal. The U.S. subjects demonstrated dominant independent self-construal, while Korean subjects demonstrated almost dual-self construal. These results are quite different from traditional assumptions that Korean people are dominantly collectivistic, while the U.S. people are dominantly individualistic.

H2: Hypothesis 2a and 2b predict the effects of social endorsement on perceived quality of news will be stronger among individuals with dominant inter dependent self-construal, while the effects will be weaker among individuals with dominant independent self-construal. To conduct two-way ACNOVA, overall self-construal (continuous variable) was transformed into a categorical variable; subjects scored bigger than 0 were under the category "dominant independent self-construal (n = 303)," and subjects scored less than 0 were under

the category "dominant interdependent self-construal (n = 241)." Twenty-three (23) subjects who scored 0 were excluded from the analysis.

The results did not indicate statistically significant main effects of social endorsement level, overall self-construal, or the interaction between social endorsement and self-construal, even after controlling for age and the perceived credibility of endorsers (Table 6). Therefore, hypothesis 2a and 2b were not supported. However, a post hoc Bonferroni test revealed, that for subjects with dominant interdependent self-construal, the difference between those who received the no and high endorsement treatments was approaching significance (p < .10); those who saw no endorsements perceived the news article was of lower quality. Figure 1 graphically shows this relationship.

Discussion

This study had two overarching goals. The first was to examine whether there are cross-cultural variations in social endorsement effects, and the second was to explore what role individual self-construal plays in the process. Departing from the dichotomized approach of individualism-collectivism and schematized understanding of each country's cultural traits, I employed independent-interdependent self-construal (Markus & Kitayama, 1991; Singelis, 1994) with individual subjects as the units of analysis. The idea was that if individual self-construal is taken into account, the wide-spread assumptions that Korea is a collectivistic country and the U.S. is an individualistic country may not apply anymore.

This approach yielded interesting findings. Firstly, the data showed that Korean subjects were not dominantly collectivistic as many scholars assumed (Jin, Yong Park, & Kim, 2008;Park, Baek, & Cha, 2014). Rather, the subjects displayed a bi-cultural tendency with the almost same level of independent and interdependent self-construal. Another notable point is that the U.S. subjects reported higher scores than Korean subjects both in independent and interdependent self-construal. While the U.S. subjects

demonstrated dominantly independent self-construal, they also had collectivistic tendencies.

These findings support the contention in the previous literature about the limitation of an individualism-collectivism dichotomous approach. It is also consistent with prior studies arguing that the development of independent self-construal does not necessarily exclude development of interdependent self-construal (Bhawuk & Brislin, 1992; Singelis, 1994; Triandis, 1994). The two dimensions of self-concepts indeed can be developed together. By showing thatwithin-nation individual variations do not necessarily correspond to the between-nation differences, this study offers a meaningful addition to the understanding of cross-cultural communication.

Secondly, based on a theoretical assumption that interdependent self-construal is linked to people's desire to conform to majority opinion, I tested whether individuals' overall self-construal (dominant independent vs. dominant interdependent) moderates the effects of social endorsement on perceived quality of news. The main idea was that if an individual has dominant interdependent self-construal, he/she is more likely to be influenced by social endorsement when evaluating the quality of news.

The results did not firmly support my prediction; whether subjects have dominant independent self-construal or dominant interdependent self-construal, the results showed that these did not significantly influence the relationship between social endorsement and perceived quality of news. Nevertheless, there was a difference in the expected direction. Particularly, for subjects with dominant interdependent self-construal, the distinctive impact of social endorsement level (none vs. high) on perceived quality of news was noticeable. On the contrary, for subjects with dominant independent self-construal, different levels of social endorsement did not have a distinctive impact on perceived quality of news.

These findings suggest independent and interdependent self-construal may influence the direction and magnitude of the social endorsement effect to some extent, albeit

not as the primary factor. The concept of similarity or homophily also offers an alternate explanation for the vague impact of self-construal on the social endorsement effects. Given that independent and interdependent self-construal are based on individuals' understanding of the relationship between self and "others in the community," distinguishing endorsers within the community from endorsers outside the community may yield different results. Therefore, future research could benefit from including varying identity of endorsers using the in-group and out-group criteria in analyzing the role of self-construal in social endorsement effects.

Upon the growing socialization of online news, this study provides a more comprehensive understanding of the role of social endorsements in message processing. Specifically, through examining the similarities and differences between Korea and the U.S., this study reveals that there could be divergences and variations in the role of social endorsements in message processing. Given the fact that no social phenomenon or process recurs in the same form (Ginsburg, 2006), cross-cultural comparative analyses help us see the divergent formations of the phenomenon and better understand the principle of variation. This enhanced understanding would benefit scholars and practitioners in the field of international communication. For instance, international public relations require a thorough grasp of the social and cultural milieu of the market. Therefore, understanding how the impacts of each information source on message processing differ across countries would be a critical asset for successful strategic communication.

While this study offers interesting findings and meaningful implications, it is important to recognize some limitations of the study and to propose better paths for future research. First, as with any cross-national research, conducting experiments in Korea and the U.S. revealed intrinsic dilemma of comparative analyses that the different findings may stem from differences in the way people being studied view their social reality, or, even

differences in the methodological approaches (Ginsburg, 2006; Kohn, 1987). For instance, although the design of this cross-national experiment was aimed at enabling valid comparative analyses of online news processing, subjects in Korea and the U.S. were quite different in their age distribution. While the number of Korean subjects in each age group was carefully balanced, the U.S. subjects in their 20s and 30s were overrepresented, making up almost 70% of the sample. Given that young adults are generally more familiar with the cues imbedded in and transmitted by digital technologies compared to older adults (Sundar, 2008; Lenhart et al, 2010), some consideration must be given to the possibility that the results of this study are specific to the sample under examination.

Differences in the way subjects view the issue created the second limitation of this study. As discussed earlier, the Korean and U.S. subjects reported significantly different levels of personal relevance to the topic, contradicting the pretest results. Considering that personal relevance can be an important factor influencing individuals' overall information processing, the results could be different if the study selected a topic that generated the equal level of personal relevance across countries. Future research would benefit from employing the same sampling process across countries and a more careful selection of the topic.

Also, subjects in Korea and the U.S. may have different interpretations of some items measuring independent and interdependent self-construal. Therefore, pre-testing all the self-construal measures and using only the items that yield similar interpretations in both countries would help us better understand the role of self-construal in news processing and evaluation.

Taken together, future research would be more fruitful with more careful consideration and reflection for the cross-national comparison method strategy. Expanding the scope of research beyond Korea and the U.S. would allow researchers to cultivate better insights

into the differences and similarities, and thus develop a causal theory that can explain most of, if not all, the cases under observation. This is, after all, the ultimate goal of cross-cultural research (Azarian, 2011).

References

Austin, E. W., & Dong, Q. (1994). Source v. content effects on judgments of news believability. *Journalism & Mass Communication Quarterly, 71*(4): 973-983.

Azarian, R. (2011). Potentials and limitations of comparative method in social science. *International Journal of Humanities and Social Science, 1*(4): 113-125.

Berinsky, A. J., Huber, G. A., & Lenz, G. S. (2012). Evaluating online labor markets for experimental research: Amazon. com's Mechanical Turk. *Political Analysis, 20*(3): 351-368.

Bhawuk, D. P., & Brislin, R. (1992). The measurement of intercultural sensitivity using the concepts of individualism and collectivism. *International Journal of Intercultural Relations, 16*(4): 413-436.

Bratta, P.M. (2009). Flag Display Post 9/11: A discourse on American nationalism. *Cultural Landscapes, 1*(3): 39-73.

Buda, R., & Elsayer-Elkhouly, S.M. (1998). Cultural differences between Arabs and

Americans: Individualism-collectivism revisited. *Journal of Cross-Cultural Psychology, 29*(3): 487-492.

Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk a new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science, 6*(1): 3-5.

Burgoon, J. K., Burgoon, M., & Atkin, C. K. (1982). *The world of the working journalist.* Newspaper Advertising Bureau.

Celinska, K. (2007). Individualism and collectivism in America: The case of gun ownership and attitudes toward gun control. *Sociological Perspectives, 50*(2): 229–247.

Cho, G.H. & Kim, E.J.(2001). Cultural dispositions and conformity to peers. *Korean Journal of Social and Personality Psychology, 15*(1): 139-165.

Cho, J., de Zuniga, H. G., Shah, D. V., & McLeod, D. M. (2006). Cue convergence associative effects on social intolerance. *Communication Research, 33*(3): 136-154.

Cho, Y.J., Mallinkcrodt, B., & Yune, S.K. (2010). Collectivism and individualism as bicultural values: South Korean undergraduates' adjustment to college. *Asian Journal of Counseling, 17*(1/2): 81-104.

Das, A. S., Datar, M., Garg, A., & Rajaram, S. (2007, May). Google news personalization: scalable online collaborative filtering. *In Proceedings of the 16th international conference on World Wide Web* (271-280). ACM.

Garrett, R. K. (2013). Selective exposure: New methods and new directions. *Communication Methods and Measures, 7*(3-4): 247-256.

Ginsburg, M. (2006). The contributions and the limitations of cross-national comparisons in examining professional development and educational quality.*EQUIP1 Issue Paper. Washington, DC: USAID/Educational Quality Improvement Project, 1.

Grimm, D., Church, A.T., Katigbak, M.S., & Reyes, J.A.S. (1999). Self-described traits, values, and moods associated with individualism and collectivism: testing I-C Theory in an individualistic (U.S.) and a collectivistic (Philippine) culture. *Journal of Cross-Cultural Psychology, 30*(4): 466-500.

Gudykunst, W. B., Gao, G., Schmidt, K. L., Nishida, T., Bond, M. H., Leung, K., & Barraclough, R. A. (1992). The influence of individualism collectivism, self-monitoring, and predicted-outcome value on communication in ingroup and outgroup relationships. *Journal of Cross-Cultural Psychology, 23*(2): 196-213.

Gudykunst, W. B., Matsumoto, Y., Ting-Toomey, S. T. E. L. L. A., Nishida, T., Kim, K., & Heyman, S. (1996). The influence of cultural individualism-collectivism, self construal, and individual values on communication styles across cultures. *Human Communication Research, 22*(4): 510-543.

Hallahan, K. (1999). No, Virginia, it's not true what they say about publicity's Implied "Third-Party Endorsement effect". *Public Relations Review, 25*(3): 331-350.

Han, K.M. & Na, Y. J. (2004). 청소년의라이프스타일과개인주의-집단주의에따른선호감성분석 [Preferred sensation of adolescents according to their lifestyle and individualism/collectivism]. 한국의류산업학회지[Korean Clothing *Research Journal], 6*(1): 51-60.

Han, S. P., & Shavitt, S. (1994). Persuasion and culture: Advertising appeals in individualistic and collectivistic societies. *Journal of Experimental Social Psychology, 30*(4): 326-350.

Han, K.S. & Shin, S.J. (1999). 한국인의선호가치변화-수직적집단주의에서수평적개인주의로 [A cultural profile of Korean society: From vertical collectivism to horizontal individualism]. 한국심리학회지: 사회및 성격[*Korean Journal of Social and Personality Psychology], 13*(2): 293-310.

Hofstede, G. (2001). Culture's Consequences: Comparing Values, Behaviors, *Institutions and Organizations Across Nations.* Thousand Oaks, CA: Sage.

Huff, C., & Tingley, D. (2015). "Who are these people?" Evaluating the demographic characteristics and political preferences of MTurk survey *respondents. Research and Politics, 2*(3): 1-12.

Hui, C. H., & Triandis, H. C. (1986). Individualism-collectivism a study of cross-cultural researchers. *Journal of Cross-Cultural Psychology, 17*(2): 225-248.

Hwang, S.M. & Yang, J.Y. (2002). 한국사회의세대집단에대한심리학적탐색 :전이적공존관점을통한대학 생집단의세대이미지분석 [The psychological investigation of generations in Koran society with transferable coexistence perspective]. 한국심리학회지 : 사회및성격[Korean *Journal of Social and Personality Psychology], 16*(3): 75-93.

Igartua, J. J., & Cheng, L. (2009). Moderating effect of group cue while processing news on immigration: Is the framing effect a heuristic process? *Journal of Communication, 59*(4): 726-749.

Jin, B., Yong Park, J., & Kim, J. (2008). Cross-cultural examination of the relationships among firm reputation, e-satisfaction, e-trust, and e-loyalty. *International Marketing Review,* 25(3): 324-337.

Kashima, Y., Yamaguchi, S., Kim, U., Choi, S.-C., Gelfand, M.J., & Yuki, M. (1995). Culture, gender, and self: A perspective from individualism-collectivism research. *Journal of Personality and Social Psychology,* 69(5): 925-937.

Kim, Y.M. (2009). 청소년과성인이지각하는한국인의특성: 집단주의-개인주의화차원에서 [Characteristics of Korean people perceived by youth and adults: From individualism-collectivism perspective]. 청소년문화포 럼[*Youth Culture Forum*], 21: 9-44.

Kohn, M. (1987). Cross-national research as an analytic strategy. *American Sociological Review, 52*(6): 713-31.

Knobloch-Westerwick, S., Sharma, N., Hansen, D. L., & Alter, S. (2005). Impact of popularity indications on readers' selective exposure to online news. *Journal of Broadcasting & Electronic Media, 49*(3): 296-313.

Lau-Gesk, L. G. (2003). Activating culture through persuasion appeals: An examination of the bicultural consumer. *Journal of Consumer Psychology,* 13(3), 301-315.

Lankov, A. (2012, April 12). Confucianism in Korea. *The Korea Times.* Retrieved from http://www.koreatimes.co.kr/www/news/opinon/2014/03/165_108831.html

Lee, J. Y., & Sundar, S. S. (2013). To tweet or to retweet? *That is the question for health professionals on Twitter. Health Communication, 28*(5): 509-524.

Lerman, K. (2007). Social information processing in news aggregation. *Internet Computing, IEEE, 11*(6): 16-28.

Lenhart, A., Purcell, K., Smith, A., & Zickuhr, K. (2010). Social media & mobile Internet use among teens and young adults. Millennials. *Pew Internet & American Life Project.*

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*(2): 224.

Mastro, D. (2009). Effects of racial and ethnic stereotyping. In M.B. Oliver & Bryant, J. (Eds.), *Media Effects: Advances in Theory and Research* (325-341). New York, NY: Routledge.

Matsumoto, D., Kudoh, T., & Takeuchi, S. (1996). Changing patterns of individualism and collectivism in the United States. *Culture Psychology,* 2: 77-107.

Meijboom, F. L., Visak, T., & Brom, F. W. (2006). From trust to trustworthiness: Why information is not enough in the food sector. *Journal of Agricultural and Environmental Ethics, 19*(5): 427-442.

Messing, S., & Westwood, S. J. (2012). Selective exposure in the age of social media: endorsements trump partisan source affiliation when selecting news online. *Communication Research,* 0093650212466406.

Metzger, M. J., Flanagin, A. J., & Medders, R. B. (2010). Social and heuristic approaches to credibility evaluation online. *Journal of Communication, 60*(3): 413-439.

Morris, M. W., & Peng, K. (1994). Culture and cause: American and Chinese attributions for social and physical events. *Journal of Personality and Social psychology, 67*(6): 949.

Na, E.Y., & Min, K.H. (1998). Discrepancies between formal/explicit and informal/implicit norms in Korea and generational gaps: Theoretical points and evidence from existing survey data. Korean *Journal of Psychology: Social Issues,4*(1): 75-93.

Park, J., Baek, Y. M., & Cha, M. (2014). Cross ⌐cultural comparison of nonverbal cues in emoticons on Twitter: Evidence from big data analysis. *Journal of Communication,64*(2): 333-354.

Park, Y.-S., & Kim, U. (2006). Family, parent-child relationship, and academic achievement in Korea: Indigenous, cultural and psychological analysis. In U. Kim, K.-S. Yang, & K.-K. Hwang (Eds.), *Indigenous and cultural psychology: Understanding people in context* (421–443). New York, NY: Spring Science + Business Media.

Perse, E. M. (2001). *Media effects and society.* Routledge.

Petty, R. E., & Cacioppo, J. T. (1981). Issue involvement as a moderator of the effects on attitude of advertising content and context. *Advances in Consumer Research,* 8(1): 20-24.

Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In L. Berowitz (Eds.), *Advances in experimental psychology* (19:124-203). New York, NY: Academic Press.

Phalet, K., & Claeys, W. (1993). A comparative study of Turkish and Belgian youth. *Journal of Cross-Cultural Psychology, 24*(3): 319-343.

Population by country (n.d.). InWorldmeters. Retrieved from www.worldmetersinfo.com.

Reid, S., Giles, H., & Harwood, J. (2005). A self-categorization perspective on communication and intergroup relations. In J. Harwood & H. Giles (Eds.), *Intergroup Communication* (241-263). New York: Peter Lang.

Rhee, E., Uleman, J. S., & Lee, H. K. (1996). Variations in collectivism and individualism by ingroup and culture: Confirmatory factor analyses. *Journal of Personality and Social Psychology, 71*(5): 1037–1054.

Salganik, M. J., Dodds, P. S., & Watts, D. J. (2006). Experimental study of inequality and unpredictability in an artificial cultural market. *Science, 311*(5762): 854-856.

Singelis, T.M. (1994). The measurement of independent and interdependent self-construal. *Personality and Social Psychology Bulletin, 20*(5): 580-591.

Singelis, T. M., & Brown, W. J. (1995). Culture, self, and collectivist communication linking culture to individual behavior. *Human Communication Research, 21*(3): 354-389.

Singelis, T. M., Triandis, H. C., Bhawuk, D. P. S., & Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. *Cross-Cultural Research, 29*(3): 240-275.

Slater, M. D., & Rouner, D. (1996). How message evaluation and source attributes may influence credibility assessment and belief change. *Journalism & Mass Communication Quarterly, 73*(4): 974-991.

Sparks, P., & Shepherd, R. (1994). Public perceptions of the potential hazards associated with food production and food consumption: an empirical study. *Risk Analysis, 14*(5): 799-806.

Sukumaran, A., Vezich, S., McHugh, M., & Nass, C. (2011, May). Normative influences on thoughtful online participation. In *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems* (3401-3410). ACM.

Stavrositu, C. D., & Kim, J. (2014). Social media metrics: Third-person perceptions of health information. Computers in Human Behavior, 35: 61-67.

Sundar, S. S. (2000). Multimedia effects on processing and perception of online news: A study of picture, audio, and video downloads. *Journalism & Mass Communication Quarterly, 77*(3): 480-499.

Sundar, S. S. (2008). The MAIN model: A heuristic approach to understanding technology effects on credibility. *Digital Media, Youth, and Credibility,* 73-100.

Sundar, S. S., Knobloch ┌Westerwick, S., & Hastall, M. R. (2007). News cues: Information scent and cognitive heuristics. *Journal of the American Society for Information Science and Technology, 58*(3): 366-378.

Sundar, S. S., & Nass, C. (2001). Conceptualizing sources in online news. **Journal of Communication**, 51(1): 52-72.

Thorson, E. (2008). Changing patterns of news consumption and participation: News recommendation engines. *Information, Communication & Society, 11*(4): 473-489.

Triandis, H. C. (1993). Collectivism and individualism as cultural syndromes. *Cross-Cultural Research, 27*(3-4): 155-180.

Triandis, H.C. (1994). Theoretical and methodological approaches to the study of collectivism and individualism. In U. Kim, H.D. Triandis, C. Kagitcibasi, & G. Yoon (Eds.), *Individualism and collectivism: Theoretical and methodological issues* (pp. 41-51). Thousands Oaks, CA: Sage.

Trubisky, P., Ting-Toomey, S., & Lin, S. L. (1991). The influence of individualism-collectivism and self-monitoring on conflict styles. *International Journal of Intercultural Relations,* 15(1): 65-84.

Vandello, J.A., & Cohen, D. (1999). Patterns of individualism and collectivism across the United States. *Journal of Personality and Social Psychology, 77*(2): 279-292.

Weaver, D. H., Hopkins, W. W., Billings, W. H., & Cole, R. R. (1974). Quotes vs. paraphrases in writing: Does it make a difference to readers? *Journalism & Mass Communication Quarterly,51*(3):400-404.

Westerman, D., Spence, P. R., & Van Der Heide, B. (2012). A social network as information: The effect of system generated reports of connectedness on credibility on Twitter. *Computers in Human Behavior, 28*(1): 199-206.

Yamaguchi, S., Kuhlman, D. M., & Sugimori, S. (1995). Personality correlates of allocentric tendencies in individualist and collectivist cultures. *Journal of Cross-Cultural Psychology, 26*(6): 658-672.

Young, N. (2007). Identity Trans/formations. Communication Yearbook, 31: 224-272. Zhang, J. (2010). The persuasiveness of individualistic and collectivistic advertising appeals among Chinese generation-X consumers. *Journal of Advertising, 39*(3): 69-80.