What's Going on in the Korean Peninsula? A Study on Perception and Influence of South and North Korea-Related Fake News

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Fake news, which contains false information to deceive audiences, may potentially influence inter-Korean relations. Two studies probe into South Koreans' experience of and reaction to fake news exposure, and their ability to distinguish fake news from real news. Study 1 reveals that people have negative attitudes for fake news and perceive its impact to be greater on others than on themselves. Study 2 tests hypotheses based on the third-person effect (TPE) and the first-person effect (FPE), discovering that South Koreans display the TPE on North Korea-related fake news and advocate fake news censorship. It also examines Korean citizens' ability to identify North Korea–related fake news and finds that most people fail to do so accurately despite considering that fake news will have a relatively small impact on themselves. We conclude that different agents should cooperate to reduce the negative impact of fake news.

Keywords: fake news, inter-Korean relations, the third-person effect (TPE), the first-person effect (FPE), media censorship

"President Moon of South Korea gives a Mercedes to Kim Jong-un as a gift."

(Ahn, Choi, & Jeong, 2018, para. 7)

"North Korea digs an underground tunnel in Seoul."

(Ahn et al., 2018, para. 9)

Above are two of many fake news headlines about North Korea that were spread through Korean portal websites and social networking services (Ahn et al., 2018). The above example about Moon was

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created by a member of Ilbe (an extreme conservative online community analogous to 4chan in the United States) and went viral when a local congressperson, who was convinced the news was real, shared it on Twitter (Lee, 2018). The news about the tunnel in Seoul was spread through a popular online messenger application called Kakaotalk (Ahn et al., 2018). Both examples can be found with a few clicks on the Internet. In the contemporary world, anyone is easily exposed to such groundless fake news. In fact, "fake news" has been so prevalent that it was chosen as the word of the year 2017 by the publishing company HarperCollins ("What Is 2017's," 2017).

Fake news is defined as news that takes the form of formal journalism, but is intentionally manipulated to contain false information to deceive audiences. The resemblance to standard news articles is what makes fake news detrimental because it is difficult to distinguish from real news. For instance, a study conducted by the Stanford Graduate School of Education found that the majority of middle school, high school, and college students were unable to tell the difference between valid and doubtful information sources (Stanford History Education Group, 2016). In the case of South Korea, only 1.8% of 1,084 citizens were able to precisely identify fake news (Oh & Park, 2017). Fake news that deals with North Korea may be especially influential because South and North Korea have minimized their diplomatic interaction since 2009, communicating with each other only when necessary (Ministry of Unification, 2017). Although the 2018 PyeongChang Olympics and three inter-Korean summits temporarily created a mood of conciliation, decades of division have limited diplomatic intercourse and have led to a low level of mutual understanding and a widening cultural gap. Thus, in the status quo, both South and North Korea are likely to lack the ability to maintain an unbiased viewpoint in diagnosing fake news on each other.

Fake news is problematic because it has an actual impact on audiences' attitudes and behaviors. For instance, in the U.S., in December 2016, an ordinary pizzeria in Washington called Comet Ping Pong was accused of being "a child sex ring run by Hillary Clinton" (Hunt, 2016, para. 5). Surprisingly, 14% of Trump supporters believed the story to be true; one of them even shot a gun at the pizzeria multiple times, arguing that Clinton's secret should be disclosed (Jenson, 2016). Similarly, in South Korea, in September 2018, online fake news claimed that North Korea demanded South Korea to send KRW 200 trillion (equivalent to US$178 billion) right after the third inter-Korean summit took place. Although it was a baseless rumor, a YouTube video conveying this news recorded more than 80 thousand views, and it eventually triggered extreme conservatives to hold an illegal demonstration (Hong, 2018). The two cases of fake news mentioned above show that it influences individuals' attitudes on political events, which in turn motivates them to take violent and illegal actions.

Considering the potential impact of fake news on inter-Korean relations, this research first examines South Koreans' overall experience, reaction, and perception of fake news in the form of an exploratory study. Subsequently, the study investigates Koreans' perceptions of the influence of North Korea–related fake news and support for government censorship on fake news contents. Furthermore, we assess South Koreans' ability to identify fake news from real news.

Literature Review and Research Questions

It was reported that 58% of adults in South Korea have encountered and believed fake news stories until they discovered they were fake ("Share of Adults," 2019). The potentials of fake news becoming prevalent and influential lead researchers to investigate fake news in multiple dimensions. For example, studies have examined various conceptual definitions and key elements (Yang, 2019), why and how it is created and disseminated (Hong & Jung, 2017; Oh & Park, 2017), as well as measures to restrain it (Hong & Jung, 2017). These studies provide insights into the overall trend of fake news research.

Although fake news can be problematic in and of itself, it can become detrimental or inconsequential depending on how individual consumers of news respond to it. When individuals recognize fake news, they may simply choose to ignore it (i.e., passive reaction), warn others about false information, or report it so that it can be corrected (i.e., active reaction). Depending on their reactions, different measures will have to be taken to minimize the negative impact of fake news. For instance, if citizens autonomously attempt to prevent and report fake news, education on how to detect fake information will be useful. However, if they stay passive, it will be necessary to remind them of the danger of fake news and encourage them to be more active. Based on this line of thinking, we first explore South Koreans' experience of and their reactions to fake news in general. Additionally, considering the potential influence of fake news on the inter-Korean relationship, South Koreans' perceptions of South and North Korea–related fake news are investigated. Moreover, we examine how South Koreans evaluate the impact of fake news, based on two different perspectives: the third-person effect (TPE; Davison, 1983) and the first-person effect (FPE; Innes & Zeitz, 1988). The TPE and FPE predict that individuals' perception of the relative influence of media contents on themselves and others will vary depending on the characteristics of media contents (i.e., socially desirable vs. undesirable). The current study investigates which effect may arise in regard to North Korea–related fake news.

The Third-Person Effect

The TPE (Davison, 1983) explicates that people consider others (i.e., third-person) to be more prone to the impact of media messages than themselves. Davison (1983) developed this concept after listening to an interesting anecdote by a sociologist who once worked as a volunteer to support his preferred candidate at a general election. One day, he discovered a competing candidate's leaflet in his mailbox, which had an impressive quality. The sociologist, worried that voters would be persuaded by the rival's leaflet, immediately started working on his own party's leaflet and distributed it to the neighborhood. However, a postelection poll revealed that neither candidate's campaign material significantly affected the voters' decision.

After listening to the story, Davison came up with an explanation that people are inclined to overestimate the impact of mass media on others' attitudes and beliefs, which he coined as the TPE (Davison, 1983). This accounts for why the effect of a persuasive message often appears not on the targeted audience but on those who "assume" the effect (i.e., the sociologist hurriedly worked on his own candidate's leaflet because he speculated that the rival's materials would strongly affect the voters).

The TPE is especially salient when a persuasive message is perceived to be socially undesirable (e.g., violence in TV, pornography, antisocial rap lyrics; Perloff, 2009). For instance, in Duck and Mullin's (1995) study, participants evaluated the extent to which different media contents would affect themselves and others. The participants reported that negative media contents, including sexual discrimination, racism, and violence, would influence the public, but not themselves. Similarly, Cohen and Davis (1991) investigated how George Bush and Michael Dukakis's negative advertisement influenced each candidate's supporters during the 1988 U.S. presidential election. The voters argued that negative ads about the candidate they supported did not affect them, yet they believed that the ads would persuade other voters and make them change their decisions.

Several psychological mechanisms facilitate the occurrence of the TPE on socially undesirable media contents. For instance, self-enhancement motivation (Alicke & Sedikides, 2009) refers to a desire to maintain positive self-images by evaluating oneself more favorably than others. Similarly, the Dunning–Kruger effect (Kruger & Dunning, 1999) describes that individuals are often misled by an illusory superiority and inflate their own social and intellectual abilities. These cognitive processes cause individuals to believe that they are capable of alleviating the negative impact of undesirable messages, whereas others are susceptible to it. Such a tendency works as a protective system that enables individuals to preserve positive self-assessment, but may also prevent them from maintaining an impartial attitude when evaluating a given situation.

The tendency to overestimate one's own capability while underestimating that of others leads to the idea that the dissemination of undesirable media contents should be restricted for the "sake of others." Gunther and Hwa (1996) studied Singaporeans' opinions on media regulation by the government, discovering that Singaporean citizens spontaneously preached the necessity of media censorship. Specifically, the majority of respondents claimed that the public is prone to the influence of TV contents about sensitive topics (e.g., nudity, extramarital sex, out-of-wedlock birth) and that the government should impose more rigorous censorship on them. Similar results were shown in South Korea; for instance, Korean undergraduates displayed greater support for government regulation on media coverage of celebrity suicide the more they believed that others would be influenced by the news (Kim, 2009). Moreover, T. Han and Yu (2016) discovered that people advocated censoring detailed news reports on suicide to minimize a negative impact on others. M. Han and Kim (2004) also found that the participants who displayed strong TPE were likely to agree with beer advertisement censorship.

The First-Person Effect

Contrary to the TPE, the FPE (Innes & Zeitz, 1988) posits that people consider the impact of persuasive messages to be greater on themselves than on others. Whereas the TPE frequently occurs with socially undesirable media contents, the FPE is salient when the contents are perceived to be desirable or promote the public interest. Innes and Zeitz (1988) developed this concept while examining the TPE. They discovered that participants exaggerated the impact of anti-drunk-driving campaigns on themselves while underestimating that of violent contents.

The FPE has been observed in various media contents that are socially desirable, including traffic safety, crime prevention, and organ donation (Hoorens & Ruiter, 1996). To specify, Gunther and Thorson (1992) examined people's perception of commercial and public service advertisements. They discovered that, regardless of the type of ad, individuals exhibited the FPE when the ad contained positive contents. Similarly, in White and Dillon's (2000) research, participants watched a public ad on organ donation. The results showed that 95% of the viewers stated that organ donation is a good behavior and that the ad would affect them more than others. The FPE also appears in children, as indicated by research in which children claimed that an antismoking ad would have a greater impact on themselves than on other kids (Henriksen & Flora, 1999).

The FPE not only occurs at the cognitive level but also promotes actual behaviors. For example, Day (2008) found that voters who displayed the FPE on campaign ads with socially desirable agendas engaged in active voting so that the bill on those agendas could be passed. It can be inferred that the voters attempted to realize the desirable impact suggested by the agendas by participating in voting.

Likewise, the TPE and FPE propose that the perception of the relative impact of media messages on themselves and the public will differ depending on the desirability of the contents. In this study, which focuses on North Korea–related news, it is expected that individuals will display the TPE rather than FPE. As aforementioned, South and North Korea have had limited diplomatic interaction, which may have hindered a mutual understanding. In this situation, South Koreans are likely to be concerned about the potential harmful impact of North Korea–related news, especially fake news that contains misleading information. Thus, it is predicted that South Koreans will overestimate the influence of fake news about North Korea on others than on themselves. Furthermore, as research has shown, people actively support government censorship on socially undesirable or sensitive media contents because they worry about others being negatively influenced. Fake news is a typical example of negative media content that is perceived as having detrimental effects on the society. Indeed, in a national survey of South Koreans (Oh & Park, 2017), 83.7% of respondents agreed that fake news is a serious threat to Korean society. Based on this line of thinking, it is predicted that individuals will show greater support for government regulation on fake news than general media contents, especially since fake news is widely perceived as problematic.

In sum, to investigate South Koreans' overall experience, reaction, and perception of fake news as well as South and North Korea–related news, the following research questions and hypotheses are proposed. Study 1 addresses Research Questions 1, 2, and 3, and Study 2 examines Hypotheses 1 and 2.

RQ1:   *What are South Koreans' experiences of fake news?*

RQ2:   *What are South Koreans' reactions after being exposed to fake news?*

RQ3:   *What are South Koreans' perceptions of South and North Korea–related fake news?*

H1:   *South Koreans will perceive a greater effect of North Korea–related news on others than on themselves.*

H2:   *South Koreans will indicate greater support for censorship on fake news than on general media.*

Method

Participants and Procedure

In Study 1, a total of 228 South Korean participants were asked about their experiences, opinions, and reactions to fake news. The participants were recruited from an online research firm's (http://www.embrain.com/eng/) nationwide panel that consists of 1.3 million people. Of the total participants, 50.0% were female, and the mean age was 35.91 years ($SD = 9.99$), which is analogous to the overall Seoul population. The participants shared their experiences of fake news in general, how they reacted to it, and their perceptions of South and North Korea–related fake news.

Regarding one's exposure to fake news, the following survey items were used: "Have you ever actually encountered or read fake news yourself?"; "At what point did you discover that the news to be fake (i.e., from the very beginning, in the middle, at the end of the article)?"; and "What made you realize that the news was fake?" Respondents were also asked to express their opinion on fake news and being unwillingly exposed to it. Furthermore, their reaction after encountering fake news was examined with items such as, "After you encountered the fake news, did you make an attempt to report and revise the false information?" and "After you encountered the fake news, did you make an attempt to inform others about the false information?" Lastly, participants were asked to indicate their perception of the influence of South and North Korea–related fake news (Rojas, Shah, & Faber, 1996). Items such as "South/North Korea–related news has a powerful effect on my attitude" and "South/North Korea–related news has a powerful effect on the public's attitudes" were used.

Content analysis was employed to classify the responses for the open-ended questions. First, the authors selected 20 random responses and carefully read and created coding categories inductively. Following the first agreement test, two coders discussed areas of disagreement and made adjustments to the initial categories. An additional 10 responses were randomly selected and coded to test the coding reliability. The last iteration of the coding manual was finalized when the sufficient level (Krippendorff's α > .67; Krippendorff, 2004) of intercoder reliability was established. The intercoder reliability for 30 responses ranged from .71 to .78, which were satisfactory. Once the coding manual was finalized, the coders separately coded 99 responses, analyzing a total of 228 responses.

In Study 2, a total of 234 South Korean participants were recruited. The online research firm that provided participants for Study 1 was used again for a probability sample of South Koreans for Study 2. Of the participants, 50.90% were female, and their age ranged from 20 to 59 years ($M = 39.18$ years, $SD = 10.90$). The proportion of gender and age was similar to that of the overall Seoul population. Among the 234 participants, 33.30% identified themselves as liberal, 19.20% as conservative, and 47.40% as moderate. Moreover, 46.60% were white-collar employees, 17.90% were professional workers, 7.10% were independent business owners, and 9.00% were college and graduate students.

Participants were asked to indicate their perception of the influence of North Korea–related news and their opinions on fake news/media censorship. In addition, their ability to discern North Korea–related fake news was examined. Items regarding media use and support for media censorship were shown first. Then, we presented a series of news headlines. Lastly, support for fake news censorship items were shown after the news headlines, to prevent participants from being primed with the words "fake news" before judging the veracity of news headlines.

We selected three headlines of real news that were proven to be credible and three headlines of fake news that were proven to contain false information. Participants were asked to judge whether each news was real or fake. Given that the primary purpose of the study was to examine how capable people are in distinguishing fake from real by reading news headlines, we had to exclude those who answered untruthfully throughout this procedure. Accordingly, 10 cases were dropped, resulting in 224 eligible participants.

Real news headlines were as follows: "U.S. Student Otto Warmbier Has Been Released From a North Korean Prison in a Coma"; "North Korea Launches Missile: Would Moon's Stance Towards North Korea Sway?"; "Kim Jong-un Says China Can No Longer Be Trusted and He Will Cooperate with Russia." Fake news headlines were as the following: "Kim Jong-un Named *The Onion's* Sexiest Man Alive for 2012"; "Gyeong-A Seo, a Female Employee at a North Korean Restaurant Kidnapped by the NIS, Dies During a Hunger Strike Demanding Repatriation to the North"; "AhnLab Provides V3 Source Code to North Korea."

Measures

Media Use

Media use was measured in terms of how frequently (i.e., how many days a week) participants used media for news consumption (Salwen, 1998). It was measured with three items: "In the past week, how many days did you watch or read news reports?"; "In the past week, how many days did you read, watch, or listen to news on social media?"; and "In the past week, how many days did you watch news on TV?" Items were measured on a 7-point scale (1 = *1 day a week*, 7 = *7 days a week*). The item reliability (Cronbach's α) for media use was .66 (*M* = 5.19, *SD* = 1.69).

Support for Censorship

Support for government censorship on general media contents and fake news were measured using well-established scales (Rojas et al., 1996; Salwen, 1998). Items for media censorship included the following: "News stories containing unpopular viewpoints should not be circulated"; "News stories that offend any sizeable group should be banned"; and "Everybody should have full liberty of propagandizing for what they believe to be true (recoded)." The Cronbach's alpha for support for media censorship was .66 (*M* = 3.68, *SD* = 0.80). For fake news censorship, items such as "The government should use legal power to ban fake newspaper stories"; "The government should use legal power to ban false stories in all the news on

TV"; and "The government should use legal power to ban fake news online" were used. The item reliability for fake news censorship was .86 (M = 5.50, SD = 1.21).

TPE (FPE)

Measurement of the TPE or FPE involved the degree to which participants considered the influence of North Korea–related news to be. The items were adopted from previously established scales (Rojas et al., 1996). TPE scores were calculated by subtracting the scores of perceived media effect on others (i.e., how much they thought news contents would influence their attitudes and behaviors) from perceived media effect on the self. Negative scores indicated that participants perceived the influence of news to be greater on others than on themselves (TPE), and positive scores indicated that they considered the news impact to be greater on themselves than on others (FPE).

All six North Korea–related news headlines were used for hypothesis testing. For each headline, participants estimated the extent to which the news would affect themselves and others. Items were measured on a 7-point Likert Scale (1 = *strongly disagree*, 7 = *strongly agree*). The item reliability for self was .87 (M = 3.60, SD = 1.16) and .87 for others (M = 3.92, SD = 1.17).

Results

Study 1 aimed to answer the three research questions on South Koreans' experience, reaction, and perception of fake news. Of 228 participants, 123 participants (53.9%) answered that they had encountered or read fake news. Of those participants who had encountered fake news, the majority (43.9%; 54 of 123) recognized the news to be fake after reading the whole article, 44 (35.8%) did while reading it, and 25 (20.3%) did as soon as they began reading the article. The difference in timing of identifying fake news may be explained by their answers on "how" they noticed false information. Among the 123 participants who previously encountered fake news, 52 participants (42.28%) reported that they identified false information after reading fact-checking articles or comments, followed by the discrepancy between the fake news content and their preexisting knowledge on the issue or intuition (34.96%), and poor reliability of the news (21.14%). This result demonstrates that Koreans rely mostly on external fact-checking sources to identify fake information. Because they mainly depend on external fact-checking channels, it is natural that they realize false information after reading the entire article.

Regarding their general perception of fake news, the majority of respondents expressed negative attitudes toward it. The predominant responses were, "Fake news may negatively influence others" (20.6%); "The government should take measures to restrict the circulation of fake news and punish its creators" (18.4%); "Fake news is bad/wrong/dangerous" (15.8%); and "Fake news should not be produced or circulated" (15.8%). Other opinions included, "Fake news may impair the credibility of news" (8.8%); "We need to develop a critical eye to distinguish fake from the truth (the necessity of fact-checking and literacy" 7.0%); and "Fake news is so widespread that there is not much we can do" (5.3%).

Not surprisingly, most participants indicated discomfort at being unintentionally exposed to fake news. Some expressed an intense repulsion, while others emphasized the importance of critical thinking to

filter out fake information. Specifically, the predominant responses were, "I don't like it/I am irritated/angry" (57.0%); "The government should restrict fake news and punish those who are responsible" (11.8%); and "It is dangerous without a critical eye/We should be able to distinguish fake news with a critical eye" (9.6%). Other opinions included, "Ethical journalism is needed" (7.5%) and "There is not much we can do because it is difficult to distinguish fake from the truth" (5.3%). In terms of their reaction after encountering fake news, only 14.6% (18 of 123) made at least one attempt to report it so that false information can be corrected. On the other hand, relatively many participants (34.1%; 42 of 123) answered that they informed others about the fake information.

Finally, regarding the potential impact of South and North Korea–related fake news, the participants in general speculated that the news would have greater impact on others than on themselves. To specify, they perceived the effect of South Korea–related fake news to be more powerful on others ($M = 4.38$, $SD = 1.42$) than on themselves ($M = 3.23$, $SD = 1.47$), $t(227) = -12.66$, $p < .001$, $\eta^2 = .41$. Similar results were shown for North Korea–related fake news. Results showed that Koreans perceived the influence of North Korea–related fake news to be stronger on others ($M = 3.90$, $SD = 1.45$) than on themselves ($M = 3.11$, $SD = 1.48$), $t(227) = -8.79$, $p < .001$, $\eta^2 = .25$.

Study 2 examined the two hypotheses in relation to the TPE. Hypothesis 1 predicted that North Korea–related fake news, which is likely to be considered undesirable, would yield the TPE. Results showed that the data were consistent with the hypothesis, $t(223) = -7.81$, $p < .001$, $\eta^2 = .21$. To specify, participants perceived North Korea–related news to be more influential on others ($M = 3.92$, $SD = 1.17$) than on themselves ($M = 3.60$, $SD = 1.16$).

Hypothesis 2 proposed that individuals' support for censorship will be greater for fake news than for general media contents. That is, individuals would consider fake news censorship to be necessary for the sake of society, and that they would support restricting the circulation of fake news. Consistent with the hypothesis, results indicated that participants expressed a greater support for fake news censorship ($M = 5.50$, $SD = 1.21$) than for general media censorship ($M = 3.68$, $SD = 0.80$). In fact, the scores illustrated that the respondents were slightly opposed to censoring general media contents while strongly supporting fake news regulation. T test results showed that the two scores were significantly different, $t(223) = -19.10$, $p < .001$, $\eta^2 = .62$.

Regarding the ability to discern fake news, only eight of 224 participants (3.6%) correctly distinguished all six of real and fake news headlines, followed by 12.1% (five correct), 21.4% (four correct), 24.6% (three correct), 21.0% (two correct), 14.3% (one correct), and 3.1% (none correct). The average score was 2.97 ($SD = 1.45$). It may indicate that although people consider others to be more prone to the influence of media messages (i.e., TPE), they may not necessarily be more competent than others in distinguishing fake from real. This could be problematic because those who think they are not affected by fake news may, in fact, be susceptible to fake news just like everyone else.

To provide a further explanation for such inference, we dichotomized participants into a high TPE score group (i.e., those with positive scores) and a low TPE score group (i.e., those with zero and negative scores) to assess the difference in their ability to discern fake news. Accordingly, a t test was conducted to

discern if the two groups would significantly differ in their capability to identify fake news. Result showed that there was no significant difference in the discernment ability between the high TPE group ($M = 3.10$, $SD = 1.39$) and the low TPE group ($M = 2.85$, $SD = 1.49$), $t(222) = -1.29$, $p = .20$, $\eta^2 = .01$. Again, this result implies the danger of underestimating the impact of media contents on themselves, because in reality, most people are equally susceptible to fake news.

As presented above, individuals' perceptions of the influence of fake news on others and on themselves were not significantly related to the ability to discern fake news. To further explore possible factors that may affect the discernment skill, sociodemographic variables such as gender and age were used in the data analysis. In addition to that, we analyzed the relationship between media consumption and one's ability to discern fake news. Past studies have shown that individuals from diverse socioeconomic backgrounds (e.g., gender and age) differ in their ability to identify false information (Cho, 2019; Oh & Park, 2017). Moreover, media use has been brought up as a significant antecedent affecting the discernment skill (Cho, 2019).

Accordingly, a two-way ANOVA was conducted to investigate whether those in various gender and age groups would significantly differ in their ability to judge the veracity of real and fake news headlines. First, there was a significant main effect of gender on discernment ability, $F(1, 216) = 10.70$, $p < .01$, partial $\eta^2 = .05$. To specify, of six questions, male participants correctly answered 3.28 questions ($SD = 1.38$) on average, whereas female participants correctly answered 2.68 questions ($SD = 1.45$). The result also showed a significant main effect of age, $F(3, 216) = 2.76$, $p = .04$, partial $\eta^2 = .04$. Age was categorized into four groups, ranging from the 20s to 50s. Post hoc comparisons using Tukey's HSD test showed that those in their 50s ($M = 3.34$, $SD = 1.45$) had a relatively higher ability to discern fake news than those in their 20s ($M = 2.59$, $SD = 1.36$), whereas those in their 30s ($M = 3.00$, $SD = 1.40$) and 40s ($M = 2.93$, $SD = 1.51$) did not differ from either those in their 20s or 50s.

Additionally, it was found that media use was positively associated with one's ability to distinguish fake news, $r(222) = .28$, $p < .01$. That is, the more news they consume, the better they are able to identify fake news. News consumption did not differ by gender, $F(1, 216) = 3.64$, $p = .06$, partial $\eta^2 = .02$, nor by age, $F(3, 216) = 1.426$, $p = .24$, partial $\eta^2 = .02$. However, the results diverged when separating the medium of news consumption by newspaper, social media, and TV. For instance, only TV news consumption was significantly related to gender, $F(1, 216) = 7.51$, $p < .01$, partial $\eta^2 = .03$, and age, $F(3, 216) = 10.17$, $p < .001$, partial $\eta^2 = .12$. In terms of newspaper consumption, neither gender, $F(1, 216) = 1.75$, $p = .19$, partial $\eta^2 = .01$, nor age, $F(3, 216) = 0.62$, $p = .60$, partial $\eta^2 = .01$, was significantly related. Similarly, gender, $F(1, 216) = 1.72$, $p = .58$, partial $\eta^2 = .001$, and age, $F(3, 216) = 0.92$, $p = .44$, partial $\eta^2 = .01$, were not related to news consumption via social media.

Discussion

This research sought to place fake news in the context of South and North Korea's current diplomatic relations by conducting two studies. Study 1 broadly explored individuals' experience of and reaction to fake news as well as the potential influence of South and North Korea–related fake news on themselves and others. As exploratory research, this study enabled an extensive understanding of the current standing of fake news

in Korea as well as how individuals react to it. The participants generally claimed that fake news has adverse effects on individuals, the media environment, and the public. Nevertheless, despite acknowledging its potential harm, few of them took action to report it or inform others about it.

An interesting finding was that the majority of individuals tended to rely on external fact-checking sources when in doubt, and thus were likely to judge the veracity of news after reading the entire article. This also implies that much of fake news cannot be identified at first glance, mostly due to its resemblance to real articles. Although a small proportion, some participants displayed frustration over being unable to discern fake news and even claimed that it could not be prevented. This relates to why respondents felt the necessity of developing critical thinking as well as governmental policies to restrict the circulation of false information.

Another noteworthy finding was that the participants perceived the impact of fake news (whether it deals with South Korea or North Korea) to be greater on others than on themselves. Not only were the t-test results statistically significant, the effect sizes (i.e., eta-squared) were also large, ranging from .25 to .41. These results may imply the presence of the TPE (Davison, 1983), which refers to individuals' tendency to consider others to be more prone to the influence of media messages than they are. This pattern was also observed in the participants' answers to the question on their general perception of fake news; the two most dominant opinions were that fake news can negatively affect "others,"' so the government should restrict its dissemination.

In Study 2, the TPE was applied to test two hypotheses. As predicted from Hypothesis 1, the TPE was observed for North Korea–related news. In addition, as for Hypothesis 2, participants displayed a greater support for censorship on fake news than on general media contents. Regarding Koreans' ability to identify fake news, results showed that only 3.6% of the participants correctly distinguished all six of real and fake news headlines, whereas the majority (63%) identified three or fewer headlines correctly. Such results align with a study conducted by the Korea Press Foundation (2017), in which only 1.8% of participants (19 of 1,084) correctly distinguished six real and fake news.

To explore possible factors affecting people's ability to discern fake news, we first probed into the relationship between their perceived influence of fake news (i.e., TPE) and discernment skill. Results indicated that TPE score was not related to the ability to identify false information. In other words, people were concerned about the public being influenced by fake news when, in fact, they were equally susceptible to the impact of fake news. This implies that individuals who overestimate the impact of fake news on the public while feeling relatively secure about themselves may equally be vulnerable to fake news. To prevent the illusion of invulnerability, individuals are encouraged to stay alert to the potential negative influence of fake news at all times.

We also looked into the effect of socioeconomic factors, such as gender and age, on ability to distinguish fake news, discovering that (1) male participants better identified fake news than did females, (2) those in their 50s displayed better discernment skills than those in their 20s, and (3) both gender and age were significantly associated with TV news consumption. These findings correspond to a national survey on South Koreans' media use (Korea Press Foundation, 2017), in which they found out that males spent significantly more time watching TV news reports than females did (males: 48.7 minutes per day; females:

40.4 minutes per day). The survey also revealed that Koreans' news consumption increased with age. To be specific, those in their 60s and older watched the news for 83.7 minutes per day, whereas those in their 20s did so for 66.2 minutes. This evidence suggests that the effect of age and gender on individuals' ability to identify fake news may be associated with time spent watching TV news. Simply speaking, the more they consume the news on TV, better able they are to distinguish fake news contents. In a sense, as TV is a traditional medium that conservatively selects which news contents to air, TV consumption might have enabled participants to gain knowledge, conduct fact-checking, and develop critical abilities to filter out false information.

Our major findings suggest that individuals are often insensible to the effect of fake news on themselves. This insensitivity can potentially be a threat that inhibits them from developing a critical eye. In the contemporary world, in which myriad information is produced, it is not easy to accurately identify what is true and false. To make matters worse, fake information spreads more rapidly and widely than facts do (Vosoughi, Roy, & Aral, 2018). As a result, people are exposed to and affected by fake news, without even noticing. In the case of Koreans, the current inactive inter-Korean communication makes it more challenging to guard themselves against groundless fake news. Therefore, we propose that individuals, media, and the government should cooperate to reduce the negative influence of fake news.

First of all, individuals have to keep in mind that anyone can be prone to the impact of fake news, especially because fake news resembles formal journalism. As indicated by the results of this study, people tend to underestimate the impact of fake news on themselves (i.e., the TPE), despite not being competent in accurately identifying false information. Thus, they have to be more aware of and be more rigorous about the potential influence of fake news on themselves. It is recommended that individuals become active consumers of reliable media sources so that they can develop critical abilities to judge what is true from false.

Secondly, the media and government should cooperate in notifying the public when fake news is spread, and take appropriate measures to warn, regulate, and punish the diffusers. It is unrealistic for the government to keep an eye on every single source of information. However, with assistance from the media, it may be possible to reduce the indiscriminate dissemination of false information. For instance, journalists should remind themselves of journalism ethics and conduct careful fact-checking before they report the news. Media–government cooperation is especially necessary because South and North Koreans cannot interact with each other directly at an individual level. Thus, to prevent the harmful effects of fake news (e.g., social disintegration; Oh & Park, 2017), the media and government should fulfill their responsibility, along with individuals' attempts to develop critical thinking skills.

This study has its limitations. To begin with, in the exploratory part of the study, we relied on self-reported measures of prior exposure to fake news, based on people's memory. In addition, two issues were associated with the selection of news headlines: time frame and news impact. The time frames, from which news headlines were selected, were somewhat arbitrary. Among the six headlines used in Study 2 (three fake and three real), real news headlines shared a similar time frame (i.e., distributed between March 2017 and July 2017), whereas fake news did not. For example, the article "AhnLab Provides V3 Source Code to North Korea" was first spread in 2012, whereas "Gyeong-A Seo, a Female Employee at a North Korean Restaurant Kidnapped by the NIS, Dies During a Hunger Strike Demanding Repatriation to the North" was

distributed by a North Korean news website in 2016. The reason behind the selection of news articles from different time periods was to select those that were relatively publicized. Because real news is mostly spread through public/traditional media, whereas fake news is first disseminated through local channels (e.g., SNS), we figured that choosing fake and real news articles that were released in a similar period would only increase the discrepancy of the amount of recognition between the two types of news.

Despite our efforts to minimize the gap between fake and real news in terms of recall, significantly fewer people recognized fake news headlines compared with real news articles. Participants who indicated that they remember seeing the fake news headline was 9.37% on average, whereas an average of 61.33% of participants recalled seeing real news headlines.[2] However, their ability to discern fake news did not dramatically differ between fake news ($M = 1.38$, $SD = 1.04$) and real news ($M = 1.59$, $SD = 0.88$) headlines. In other words, although there was a large difference between the number of people who recognized fake and real news headlines, the discernment ability did not differ significantly. In future studies, it would be useful to examine the impact of news articles (e.g., number of views and shares) before the experiment to control for this factor. It would eliminate the potential confounding effects of news articles on people's ability to discern fake news. It may also be interesting to manipulate the impact of the news articles in experimental settings to explore how people's perceptions toward news articles change accordingly.

Lastly, for Hypothesis 1, we assumed that South Koreans would hold negative attitudes toward North Korea–related fake news and observed a strong degree of TPE as a result. However, it is possible that this result may not be viable in the future. We need to acknowledge that the diplomatic relation between South and North is currently evolving, and South Korea and other interested parties' (e.g., the U.S., Japan, China) relationship with North Korea may influence the public's perceptions of North Korea–related news. Hence, it is essential to carefully build hypotheses by reflecting on the diplomatic relation between the two nations.

In conclusion, people in South Korea tend to think that they are immune to fake news, but consider others to be susceptible to its harmful effects. It is possible, however, that in general, people themselves can also be affected by fake news even if they do not acknowledge it. Hence, everyone involved directly or indirectly in the current media environment, such as news reporters, distributors, and consumers, need to be aware of the potential effects of fake news on society as well as on themselves. Scholars should continue investigating the diverse aspects of fake news so that its impact on society will be more accurately and systematically assessed.

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[2] The percentages of people recalling six news headlines are as follows: "U.S. Student Otto Warmbier Has Been Released from a North Korean Prison in a Coma" (86.2%); "North Korea Launches Missile: Would Moon's Stance Towards North Korea Sway?" (70.1%); "Kim Jong-un Says China Can No Longer Be Trusted and He Will Cooperate with Russia" (27.7%); "Kim Jong-un Named *The Onion's* Sexiest Man Alive for 2012" (8.9%); "Gyeong-A Seo, a Female Employee at a North Korean Restaurant Kidnapped by the NIS, Dies During a Hunger Strike Demanding Repatriation to the North" (10.7%); "AhnLab Provides V3 Source Code to North Korea" (27.7%).

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