Doubt Versus Trust: Framing Effects of the News About the 2018 Trump‒Kim Jong Un Summit in Singapore on American College Students

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This article examines the effects of trust versus doubt news frames during the 2018 denuclearization summit between the United States and North Korea in June 2018, an issue that is characterized by negative media coverage about North Korea and its leader Kim Jong Un. An experimental study conducted in 2018 at a public university in the United States found that participants (N = 297) showed a more negative attitude toward North Korea if they read an article framed as doubt compared with an article framed as trust. Exposure to the doubt-framed article was significantly related to participants’ strong support for maintaining sanctions against North Korea and weak support for deepening diplomatic ties with the country. The analysis also reveals that low “need to evaluate” individuals were more affected by the doubt-framed news about North Korea than the trust-framed news.

Keywords: framing effects, North Korea, denuclearization summit, need to evaluate

On June 12, 2018, U.S. President Donald Trump and the North Korean leader Kim Jong Un met in Singapore for a first-ever summit between leaders of the United States and North Korea. The meeting took place in Sentosa, the diplomatically neutral city-state island of Singapore. In a show of solidarity, the pair shook hands at a luxury hotel before proceeding to the talks. As part of his pitch, Trump showed Kim a White House-produced video to sell him on what the future of his country could be if it gave up its nuclear weapons. The video was cut in the style of a Hollywood movie trailer featuring Trump as the “hand of peace” and Kim as the person who has the choice to “advance his country” and be the “hero of his people” (Pak, 2018).

During the meeting, the two leaders discussed the issue of nuclear weapons on the Korean Peninsula. The meeting also aimed to build stable peace between the United States and North Korea and for the region. After their nearly five-hour summit, Trump and Kim signed a document promising to work for “complete denuclearization of the Korean Peninsula” (The White House, 2018). The one-page agreement

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Date submitted: 2019‒07‒22

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contained four commitments, but with no specifics on how the two leaders would accomplish them: (1) establish a new U.S.–North Korea relation for peace and prosperity, (2) join efforts to build a lasting and stable peace regime on the Korean Peninsula, (3) reaffirm the commitment by North Korea to work toward complete denuclearization of the Korean Peninsula, (4) and recover and repatriate the remains of missing troops and prisoners from the Korean War (The White House, 2018).

The summit marked a historic moment given that the United States and North Korea have been hostile enemies since the outbreak of the Korean War in 1950, and that up until a few months before the summit, there were real fears of a major war between them on the Korean Peninsula (Park, 2018). The summit was covered extensively by the U.S. media, with coverage primarily constructed around two competing positions: doubt in North Korea’s sincerity to denuclearize versus trust in North Korea’s efforts (Vernon, 2018).

Most American media outlets emphasized that Kim was not serious about denuclearization and the summit was a ruse to get the United States to lift its sanctions against the country, and they questioned the success of the summit contending that Trump failed to get confirmation that Kim Jong Un would completely eliminate North Korea’s nuclear weapons (Bender, Gordon, & Cheng, 2018; Pak, 2018; Vernon, 2018). Against the dominant voice of doubt, other media outlets focused on a "trust" frame, reporting that Kim at least demonstrated a willingness to consider denuclearization (Nakamura, Rucker, Fifield, & Gearan, 2018; Osnos, 2018).

The current study investigated the effects of competing frames (doubt vs. trust) when public opinion and media coverage had crystallized around a dominant frame, in this case, the negative view (doubt) of North Korea/Kim Jong Un. This experimental study tested fram ing effects in the context of the 2018 denuclearization summit between the United States and North Korea through a randomized, controlled experiment. This study focused on the effects of frames on attitudes and issue-relevant cognitions, especially when one frame dominated the headlines. The study also inquired whether the "need to evaluate" and knowledge about North Korea moderated the influence of news frames. To delve into these issues, an experiment involving 297 U.S. college students was conducted two weeks after the 2018 denuclearization summit.

**Literature Review**

**Research Context**

The joint American–Russian occupation of Korea at the end of World War II was supposedly preliminary to the reestablishment of the country as a unified nation. Disagreements over how that was to be accomplished resulted in the division of Korea into communist and noncommunist regions along the 38th parallel. The Korean War of 1950–1953, which is still controversial regarding who initiated it, ended with

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1 North Korea has consistently argued that the United States initiated the war, but many South Korean documents and studies refute this claim. Like North Korean works, Russia’s (former Soviet Union) writings
an armistice to keep the two Koreas separate. Since the outbreak of the war, the United States and North Korea remain hostile to each other (Park, 2018).

The hostility between the United States and North Korea has at times been so strong that President George W. Bush referred to North Korea as part of an “axis of evil” during his 2002 State of the Union address (Lim & Seo, 2009). In January 2003, North Korea withdrew from the Nuclear Nonproliferation Treaty, which requires non-nuclear weapon states to forswear the development and acquisition of nuclear weapons, and began operating nuclear facilities. In August 2003, the Six-Party Talks were a major diplomatic effort by China, Japan, North Korea, Russia, South Korea, and the United States to try to get North Korea to dismantle its nuclear program (Buszynski, 2013). The Six-Party Talks were a series of multilateral negotiations held intermittently that resulted in the signing of the Geneva Agreement in 2005, in which North Korea pledged to abandon all nuclear weapons and nuclear programs and allow verification in exchange for the U.S. pledge of energy assistance and the promise not to invade North Korea. However, the agreement was suspended when North Korea broke its promise by conducting its first nuclear test in October 2005 and then declaring itself a nuclear state in November 2006 (Arms Control Association, 2019).

The United Nations condemned the actions and issued two Security Council Resolutions in 2006 and 2007. In February 2007, Pyongyang agreed to shut down the nuclear facilities at Yongbyon, provide a complete declaration of all its nuclear programs, and disable all of its existing nuclear facilities in return for an additional supply of 950,000 tons of heavy oil. In turn, the United States agreed to remove Pyongyang from its list of state sponsors of terrorism and to stop its imposition of sanctions on North Korean funds in foreign banks (Park, 2018).

In May 2009, North Korea once again broke its promise by conducting another nuclear test. The United States and North Korea, however, reached another agreement in February 2012, in which Pyongyang promised again to suspend operations at the Yongbyon uranium enrichment plant, invite International Atomic Energy Agency inspectors to monitor the suspension, and implement moratoriums on nuclear and long-range missile tests. In return, the United States would send North Korea 240,000 metric tons of food aid under strict monitoring. Yet, two months later, North Korea launched a weather satellite using a three-stage liquid-fueled rocket, Unha-3. The United States reproached North Korea for violating the pledge it made in the February agreement to stop launching long-range missiles; the United States therefore suspended its plan to deliver food to North Korea (Arms Control Association, 2019).

North Korea’s nuclear program has since advanced, particularly under the rule of Kim Jong Un, who became the leader in December 2011, after the death of his ruling father Kim Jong-il. In July 2017, North Korea successfully tested its first intercontinental ballistic missile and celebrated its strengthened program by verbally antagonizing the United States. In response to heightened North Korean anti-U.S. rhetoric, Trump warned that any North Korean attack “will be met with fire, fury and frankly power, the likes of which the world has never seen before” (Baker & Choe, 2017, para. 3).

generally accuse the United States (H.-K. Kim, 1980). Bruce Cumings (1990) claimed that it is unclear whether it was North Korea or South Korea that initiated the military action on June 25, 1950.
In January 2018, another diplomatic effort began when Kim Jong Un declared the country’s nuclear arsenal “complete” and wanted North Korea to compete in the South Korean Olympics. North Korea’s delegation to the Olympics included Kim’s sister, who met with South Korean President Moon Jae-in. That meeting led to discussions between Moon Jae-in and Kim Jong Un about North Korea’s potential denuclearization, economic cooperation, aid to North Korea, and formally ending the Korean War (Aum et al., 2020).

During a meeting with South Korean officials in Pyongyang, the capital of North Korea, in March 2018, Kim Jong Un conveyed his interest in meeting with Trump, who surprised the world by agreeing to meet in Singapore. On June 12, 2018, at the Capella Hotel on Sentosa, Singapore, Trump and Kim Jong Un signed a comprehensive document, agreeing to establish a new political relationship, to build a lasting and stable peace regime that formally ends the Korean War, and to commit to complete denuclearization of the Korean Peninsula. The summit signaled a positive sign that denuclearization can be achieved in a nonviolent manner (Park, 2018). Trump boasted of the “very comprehensive” agreement that would “take care of a very big and very dangerous problem for the world” (Nakamura et al., para. 34). In a press conference two hours later, Trump revealed one key detail that was omitted in the text of the accord: suspension of U.S. military exercises with South Korea. The war games have long irked Pyongyang, which is technically still at war with South Korea and the United States after the Korean War.

**Media Framing**

In communication studies, the term frame is used as either a media frame or an individual frame (Chong & Druckman, 2007a). A media frame refers to the words, images, phrases, and presentation styles that a media outlet uses when disseminating information about an issue or event to an audience (Gamson & Modigliani, 1989). In this vein, Entman (1993) defines framing as the process of “select[ing] some aspects of a perceived reality and making them more salient in a communicating context” (p. 52).

An individual frame refers to an individual’s cognitive understanding of a given situation (e.g., Goffman, 1974). Unlike a media frame, which reflects a media outlet’s emphasis, an individual frame refers to what an audience member believes is the most salient aspect of an issue (Chong & Druckman, 2007a). For example, an individual who feels that North Korea was not serious about denuclearization would doubt North Korea’s intention.

A framing effect occurs when in the course of describing an issue or event, a speaker’s emphasis on a subset of potentially relevant considerations leads individuals to focus on these considerations when forming their opinions (Druckman, 2001). For example, if a speaker describes a gun-regulation rally in terms of increasing gun violence, then the audience will subsequently base their opinions about the rally on gun-violence considerations and support the right to rally. In contrast, if the speaker uses a Second Amendment frame (constitutional right to gun possession), the audience will base its opinions on constitutional right considerations and oppose the rally.
A frame promotes a particular understanding and interpretation of an issue (Entman, 1993; Nelson, 2013; Porto, 2007). The framing effect manifests itself in the causal relationship between the news frame as an independent variable and the audience frame as a dependent variable. News frames can exert significant impact on the audience’s cognitive responses by guiding the audience’s thought in directions consistent with the issue interpretation suggested by the news frame (De Vreese, 2004; Iyengar, 1987; Price, Tewksbury, & Powers, 1997).

Framing of the Summit in American Mass Media and Social Media

On the day Trump and Kim Jong Un met, the American press was out in full force with all the major broadcast and cable networks and newspapers on-site (Lim, 2018). In addition, nearly 4 million tweets were posted about the summit from June 1 to 13, the day the meeting was confirmed to the day after the event (Ng, 2018). Social conversation about the summit produced 351,000 social media posts, doubling the media coverage count of 178,000 during June 10 and 13. Twitter generated around 283,000 posts, and Facebook came in second with 17,900 posts (Manglinong, 2018). Some social media users were happy that the agreement was signed, and others were more skeptical (Rakin, 2018).

The two main frames used for the summit were doubt and trust. The trust frames encompassed three distinct categories. First, some articles focused on North Korea and Kim Jong Un. They described Kim as serious about denuclearization. The summit “generates a North Korean Commitment to work toward denuclearization” (Galbraith, 2018, para. 1). Second, the trust-framed articles praised Trump for his bold decision to meet the North Korean leader. For example, The Wall Street Journal positively painted Trump for this effort of “ending more than six decades of enmity” (Bender et al., 2018, para. 13). Third, some articles described the summit as a success. For instance, The Wall Street Journal was empathetic to North Korean interests, declaring the summit “an initial step” toward permanent peace and “enough for each side to claim an achievement” (Bender et al., 2018, para. 8).

Although the summit resulted in a historic agreement toward complete denuclearization of the Korean Peninsula, the American press was largely skeptical, if not hostile, toward Kim Jong Un and Trump (Haltiwanger, 2018; Vernon, 2018). The doubt frames can be classified into three distinct categories. First, some articles considered Kim Jong Un disingenuous about denuclearization. For example, The Washington Post and The New York Times bemoaned the lack of nuclear accountability of North Korea. An article in The New Yorker stated, “North Korea made no specific commitments about dismantling its nuclear program” (Osnos, 2018, para. 5). The Washington Post voiced that “it remained highly uncertain whether the young dictator” would “eliminate his nuclear arsenal” (Nakamura et al., 2018, para. 1). Second, some of the doubt-framed articles were suspicious of Trump, stating that Trump miscalculated North Korea’s intention (Eberstadt, 2018). Kevin Liptak, CNN’s White House producer, said it is “shameful to engage with a brutal dictator” (Kim, 2018, para. 4). Fox News host Shepherd Smith accused Trump of giving Kim everything he wanted while receiving virtually nothing in return (Feldman, 2018). Lastly, the doubt-framed articles

2 Founded in 2001, Meltwater uses software of the same name to employ artificial intelligence to track social media trends and produce insights for marketing and public relations firms.
asserted that the summit was a failure. For instance, *The New York Times* labeled the joint statement between Trump and Kim "as skimpy as the summit meeting was extravagant" (Landler, 2018, para. 5).

North Korea has been framed as a "threat" in American media for decades (Dai & Hyun, 2010; K. H. Kim, 2014), and this narrative resonates with the American audience because it "fits well into a large number of already existing tropes, schema, or frames" (Curran & Gibson, 2019, p. 5). American journalists, social media users, and news consumers are inured to North Korea’s promises and broken promises of denuclearization, and thus have a plethora of well-established frames that they can turn to in producing and consuming news about the country. It is understandable that American media’s coverage of North Korea during the summit mostly relied on the familiar perspective of doubt.

American media, including social media, mostly framed the denuclearization deal as moot, highlighting the doubt frame toward North Korea/Kim, Trump, or the summit. Particularly, American mass media were critical of both North Korea and Kim Jong Un as many of them pointed out that Kim was not serious about carrying through with his plan (Haltiwanger, 2018; T. Kim, 2018).

**Hypotheses and Research Questions**

*Conventional Framing Effects*

Several surveys conducted before and after the summit suggest that the event had a significant impact on Americans. On June 17 through 19, *The Economist/YouGov* surveyed 1,500 U.S. adults and found that perceptions of North Korea improved. Ten percent of those surveyed said North Korea is an ally or friendly to the United States, twice as many as the previous week. But only a quarter thought North Korea agreed to give up nuclear weapons, showing a strong doubt perception. Another survey by *The Washington Post–ABC News* (June 13–15) showed a similar result: Fifty-three percent of Americans said it is unlikely that Kim Jong Un will give up nuclear weapons, although the number of those who said it is "very" unlikely had dropped from 42% in April to 25% in June (*The Washington Post*, 2018). These results suggest that perceptions of North Korea were influenced by the mass media’s and social media’s political rhetoric and constructed narratives about the summit.

Overall, it appears that U.S. media discourse on the denuclearization deal is not a tight contest of alternative frames but takes one side or the other (Vernon, 2018). Thus, when someone reads an article that expresses the dominant doubt frame (Kim is not serious), he or she might view the country in a negative light. In contrast, even when people read news articles that emphasize the trust frame (Kim is serious), they are still overpowered by the "louder" dominant doubt frame. By interpreting the issue as either North Korea/Kim is serious or is not serious, the frames essentially advocate for a particular position, which might affect recipients’ attitudes (De Vreese, 2004; Nelson, Clawson, & Oxley, 1997). Drawing on this reasoning, Hypothesis 1 poses that

**H1:** Exposure to news about the summit that is framed as doubt has a stronger influence on readers’ attitudes toward North Korea than exposure to news framed as trust.
Framing Effects on Related Topics

How a story is framed not only affects the recipient’s attitude toward the primary issue, but also attitude toward related topics. The theory of spreading activation posits that human memory is organized as a network of concepts that has the potential of changing associations between primary topics and related issues (Collins & Loftus, 1975). According to the theory, activation of a specific concept (e.g., nurse) can spread through an associative-semantic network, and may activate a related concept (e.g., doctor).

A news story in the same way can act as a stimulus that activates linkages among similar concepts (Zaller & Feldman, 1992). In short, once a node of the semantic network is activated by a story, it becomes a point of reference and is used by a recipient as a criterion for further information processing or judgment formation (Brewer, Graf, & Willnat, 2003).

The way news stories about the summit were framed could have influenced both the reader’s attitude toward the primary issue as well as related issues. In this case, judgments derived from the framing of Kim Jong Un’s sincerity toward nuclear disarmament could extend to attitudes about sanctions and about how to manage diplomatic ties. Therefore, it is hypothesized that

H2a: Exposure to news about the 2018 denuclearization summit framed from the dominant doubt perspective is significantly related to participants’ strong support for maintaining sanctions against North Korea.

H2b: Exposure to news about the 2018 denuclearization summit framed from the dominant doubt perspective is significantly related to participants’ weak support for deepening diplomatic ties with North Korea.

Framing Strength and Counterargument

In competitive media and political environments in which individuals are exposed concurrently to each side’s strongest frame, the frames tend to cancel out and exert no net effect (Chong & Druckman, 2007b; Druckman, Hennessy, St. Charles, & Webber, 2010; Sniderman & Theriault, 2004). In most instances, however, some frames receive more media coverage and more support from the public than other frames. As a result, dominant frames have a stronger effect on public opinion than peripheral frames (Chong & Druckman, 2007a). Furthermore, some news frames that run counter to the dominant cultural or political ideology are easily drowned out by the voices that perpetuate the status quo (London, 1993). In this sense, when exposed to a peripheral or counterframe, news consumers might reject it off hand or they might come up with a counterargument that strengthens the prevailing frame, although the effect of a counterframe may vary by each individual’s characteristics.

In the case of news coverage of the North Korea/U.S. summit, the doubt frame cast North Korea and Kim Jong Un in an unfavorable light, whereas the trust frame showed Kim’s good intentions. Because trust was not the central theme of mainstream or social media, readers might have needed to pose a counterargument in line with the dominant frame about Kim Jong Un. This study, thus, asked whether
readers who were exposed mostly to trust-framed stories devised arguments to make sense of the conflicting situation. Considering that past research provides limited insight into the question of the factors affecting counterargument to a peripheral/counterframe, the following research question is posed.

RQ1: Are news consumers who are exposed to trust-framed stories more likely to counterargue than participants exposed to doubt-framed stories?

Cognitive Responses as a Framing Effect

When exposed to a mediated message, a person cognitively processes the meaning of the message and generates his or her own thoughts in response (Petty & Cacioppo, 1996), leading to both immediate (Petty, Ostrom, & Brock, 2014) and long-term acceptance of persuasive communications (Chattopadhyay & Alba, 1988). News frames can influence the way people think about a topic and can sway them to support or dismiss an issue (Price et al., 1997). Based on the literature, it was expected that those who are exposed to news stories about the denuclearization deal, regardless of trust or doubt frames, are going to think about the situation from more perspectives than those who are not exposed to news about the summit.

H3: Respondents exposed to news stories framed as either trust or doubt about North Korea and Kim Jong Un demonstrate a greater range of thoughts about North Korea than those who are not exposed to such news.

Moderators of Framing Effects

The tension between the United States and North Korea is reflected in public opinion. For example, in 2017, three quarters of Americans believed that North Korea’s nuclear program was a critical threat to the United States, but by 2018, six in 10 Americans felt the same way (Friedhoff, 2018). Although the media might have helped create a more favorable perception, it might not have been strong enough to overcome personal animosity toward North Korea. Knowledge of North Korea and the need to evaluate information about the country could moderate the impact of mass media framing on public opinion about the summit and North Korea.

Knowledge of North Korea

Knowledge of a subject can both enhance and diminish the effects of framing. When people are already knowledgeable about a topic, they have the ability to analyze and consider the different frames or perspectives (Krosnick & Brannon, 1993; Nelson et al., 1997). On the other hand, frames also have a strong impact on less knowledgeable individuals (Haider-Markel & Joslyn, 2001; Kinder & Sanders, 1990) because they possess fewer strongly held opinions and thus are more open to new ways of thinking (Kinder & Sanders, 1990). Both perspectives make sense: Knowledge facilitates the analysis of new frames and thus strengthens the effect of framing, and little knowledge makes people more open to new ideas, also strengthening the effect of framing. In the case of North Korea, it is not known how knowledge might have influenced the effect of media framing. Therefore, the next research question asks
RQ2: Does knowledge about North Korea affect the relationship between exposure to doubt and trust frames about North Korea and attitudes toward North Korea?

Need to Evaluate

The influence of a particular media frame also depends on a reader’s need to evaluate or the tendency to form opinions (Jarvis & Petty, 1996). People high on this trait tend to enjoy judging what they hear about, whereas people low in this trait are less judgmental (Bizer et al., 2004).

In addition, individuals high in need to evaluate tend to base their opinions on information collected over time; thus, their viewpoints are set and they are less influenced by newer media frames. Conversely, people low in need to evaluate are more open to new ideas and recent media frames (Druckman, 2003). Hence, the following hypothesis is posed:

\[ H4: \text{News consumers low in need to evaluate are more likely than consumers high in need to evaluate to be swayed by both the trust and doubt news stories about North Korea/Kim Jong Un.} \]

Method

Design and Procedure

An online randomized controlled experiment was conducted during the two weeks after the Singapore summit between Trump and Kim Jong Un in June 2018. The participants were undergraduate students, all U.S. citizens, who attended a medium-sized college in the eastern United States. All potential participants completed a preexperiment online questionnaire that asked about demographics, knowledge of North Korea, and need to evaluate. Of 334 respondents who completed the preexperiment questionnaire, 37 who did not answer all questions or spent too much time (more than 2 standard deviations from the mean) answering the knowledge questions were not allowed to participate further for fear that they might have looked up the answers to the knowledge measures.

The 297 participants who completed the preexperiment survey were randomly assigned to one of two treatment conditions. One group \( (n = 99) \) read a news story about the North Korean summit that was framed as doubt, and the other group \( (n = 99) \) read a news story that was framed as trust. The two news reports were of comparable length, and both analyzed Kim Jong Un and North Korea’s stance on denuclearization. The news stories were written by a former journalist and presented as Associated Press stories. A third control group of respondents read a news story about health care instead of the summit \( (n = 99) \).

Preexperiment Survey Variables (Moderators)

The preexperiment survey asked respondents their gender and age as of their last birthday. The question for party affiliation asked, “In politics today, do you consider yourself a Republican, Democrat, or Independent?”
Knowledge of North Korea

Four multiple-choice knowledge questions were formulated based on news stories of North Korea by major U.S. media outlets: (1) "Who is the current leader of North Korea?" (2) "Which is the capital of North Korea?" (3) "Which is the closest ally of North Korea?" (4) "Which is name of the U.S. Secretary of State who visited North Korea recently?" A correct answer was given a score of 1 point, and an incorrect answer scored no points. Correct responses were combined into an index (Kuder–Richardson Formula 20 = .47, \(M = 2.07\), SD = 1.25).

Need to Evaluate

Three statements informed by Bizer and associates (2004) measured the extent to which respondents are prone to forming evaluative judgments: (1) "Would you say you have opinions about almost everything?" (2) "Compared to the average person, do you have more opinions about whether things are good or bad?" (3) "Do you think it is better to have definite opinions about lots of things?" Responses were assessed on a 7-point scale and were averaged to yield an index (\(\alpha = .86\), \(M = 4.09\), SD = 1.86).

Online Randomized Controlled Experiment

Independent Variables

To reduce the between-messages differences of the independent variables and to maintain control across the conditions, the doubt- and trust-framed stories mirrored each other in length and layout. The lede and the concluding paragraphs were constructed using excerpts from actual news stories and remained the same in both treatment conditions. Following Brewer (2002), the middle paragraphs were edited to emphasize either the doubt or the trust frame.

There is a nuanced difference between North Korea and Kim Jong Un. For example, if a story describes North Korea’s nuclear development as a result of Kim’s own personal ambitions, it is Kim himself who bears responsibility for choosing to create nuclear weapons. On the other hand, if a story focuses on North Korea, it emphasizes the long-standing enemy easily recognized and heuristically evaluated by an American audience. Although the difference is important, it is undeniable the two are often used interchangeably in news. Thus, this study created the independent variables focusing on both Kim Jong Un and the North Korean state.

Dependent Variables

Participants read either the doubt-framed or the trust-framed story. After reading the stories, participants were asked questions about their attitude toward North Korea. The responses were used to assess the influence of the doubt-framed and trust-framed news stories on the participants’ attitudes toward North Korea.
Attitude toward North Korea. Two items were used to rate the extent to which participants agreed with the statements pertaining to North Korea’s intentions (e.g., “North Korea is not serious in denuclearization” and “North Korea is not honest in the deal”). Responses were assessed on a 7-point scale and were averaged to create an index (Spearman–Brown coefficient = .61, $M = 5.02$, $SD = 1.77$), with higher values indicating a more unfavorable attitude.

Support for maintaining sanctions. On a 7-point scale, participants were asked to rate their level of agreement with the following two statements: (1) “The international society should maintain financial and economic sanctions as to North Korea” and (2) “The international society should maintain restrictions on imports from and exports to North Korea.” Responses were averaged to create an index (Spearman–Brown coefficient = .50, $M = 5.03$, $SD = 1.48$), with higher values indicating preference for stronger sanctions.

Cognitive responses and counterarguments. After reading either the doubt- or trust-framed story, participants wrote their thoughts in free-form style related to denuclearization and North Korea. This measure of cognitive responses was informed by De Vreese (2004). Two graduate students majoring in mass communication content analyzed each response, with a single response as the unit of analysis. Each comment (a train of thought about North Korea) written by a participant was counted as a “cognitive response” (cognitive responses Krippendorff’s $\alpha = .90$). Following Brock (1967), the coders then counted the number of “counterarguments.” A counterargument was when a participant in the doubt group wrote a comment that supported North Korea, or when a participant in the trust group wrote something negative about North Korea (Krippendorff’s $\alpha = .85$).

Data Analysis

To answer the hypotheses, a one-way analysis of variance and chi-square tests of independence were conducted. Model 1 from the PROCESS macro in SPSS tested for interactions between the two possible moderators (knowledge and need to evaluate) and the article frame on the dependent variable (attitude toward North Korea).

Results

Preexperiment Survey

Of the 297 respondents who were used for final analysis, 55.8% were women, and the mean age was 20.3 years. Thirty-one percent of the participants identified themselves as Democrats and 27% as Republicans. Self-identified independents were 39%, and the rest did not reveal their party affiliation. The participants generally did not know much about North Korea; the average knowledge score was 2.07 of 5. The score for need to evaluate was slightly above the midpoint (4.09 on a 7-point scale).

Online Randomized Controlled Experiment

The first hypothesis predicted that exposure to the doubt-framed story would have a stronger influence than the trust-framed story on attitudes toward North Korea. The analysis found a significant effect
of the article frames on attitudes toward North Korea, $F(2, 294) = 10.85$, $p < .001$. A Tukey post hoc test revealed that participants had a more negative attitude toward North Korea if they read the article framed as doubt ($M = 5.98$, $SD = 1.22$) compared with the article framed as trust ($M = 4.83$, $SD = 0.98$). Thus, Hypothesis 1 was supported.

Hypotheses 2a and 2b predicted that news frames would exert a significant impact on the participants’ evaluation of matters associated with the issue mentioned in the frame (either doubt or trust). In other words, the hypothesis supposed that if a participant wrote a negative comment about North Korea, that negative attitude would spill over to other issues, for example, the participant would also support sanctions or cutting off diplomatic ties. The analysis revealed a significant effect for article frame on attitude toward sanctions, $F(2, 294) = 12.72$, $p < .001$, and diplomatic ties, $F(2, 294) = 6.44$, $p < .001$. Participants more strongly supported maintaining sanctions against North Korea if they read the article framed as doubt ($M = 5.46$, $SD = 1.58$) compared with the article framed as trust ($M = 4.43$, $SD = 1.13$). Participants were also less likely to support deepening of diplomatic ties between the United States and North Korea if they read the article framed as doubt ($M = 2.97$, $SD = 0.95$) compared with the article framed as trust ($M = 3.53$, $SD = 1.14$). Thus, both Hypotheses 2a and 2b were supported.

The first research question asked about counterarguments to the trust- and doubt-framed stories. The findings show that a significantly higher percentage (33%) of the participants in the trust-framed condition argued against the story frame compared with the 5% of participants in the doubt-framed condition who supported North Korea, $\chi^2(df = 1) = 31.92$, $p < .001$.

Hypothesis 3 predicted that mere exposure to news about the summit, regardless of the frames, would induce a greater range of cognitive responses on the topic in the treatment conditions as compared with the participants in the control group. This hypothesis was supported, $F(2, 294) = 20.35$, $p < .001$. The participants in the control group wrote fewer comments about the summit ($M = 38.7$, $SD = 15.7$) than the participants in the trust-framed group ($M = 72.0$, $SD = 26.1$) and the doubt-framed group ($M = 68.3$, $SD = 27.6$). There was no statistical difference in number of words between the trust- and doubt-framed groups.

**Moderating Effects**

The second research question and Hypothesis 4 concerned possible moderators of framing effects. For Research Question 2, which pertained to knowledge about North Korea as a moderator, there is no interaction between the article frame and attitudes toward North Korea. Hypothesis 4’s prediction of need to evaluate as a moderator was supported as there was an interaction between article frame and need to evaluate on attitude toward North Korea, $B = .41$, $SE = .15$, $t(5) = 5.82$, $p < .001$, 95% CI [.12, .71], $R^2$ change due to interaction = .05. Participants with low need to evaluate scores were more likely to say that they believed North Korea if they read the trust-framed article, and they were less likely to say that they believed North Korea if they read the doubt-framed article.
Discussion

Framing Effects

This study builds on existing research on the effects of news frames by expanding it to an international event: the 2018 denuclearization summit between the United States and North Korea. In addition to testing the framing effects, this study also examined whether knowledge and need to evaluate moderate framing effects.

The findings suggest that conventional framing effects on attitudinal change hold for provocative issues such as the denuclearization summit. Reading an article that framed North Korea’s action during the summit as doubtful led participants to form an unfavorable attitude toward North Korea compared with those who read an article that emphasized the trust aspect of North Korea and Kim Jong Un.

Furthermore, the frame-induced differences in attitudes toward North Korea spilled over to attitudes toward closely related issues, specifically maintaining sanctions and diplomatic ties. This result provides evidence that supports spreading activation theory, which postulates that thinking about one issue triggers similar thoughts about a related concept (Brewer et al., 2003). The American media tend to link the North Korea nuclear issue to sanctions, for example, emphasizing such words as “maximum pressure.” When news readers think of North Korea, they could then naturally connect it to economic sanctions.

The wider acceptance of the doubt frame is evident in that a larger percentage of participants counterargued the trust-framed story than the percentage that counterargued the doubt-framed story, even though they were not prompted to challenge the frames they read. The acceptance of the doubt frame demonstrates that some considerations related to an international issue are salient enough to become entrenched in people’s minds (e.g., North Korea is a serious threat to the United States), and such considerations prevail regardless of whether the media frame the issue positively or negatively, as in the recent coverage of the denuclearization summit. In other words, when exposed to a perspective that stood at odds with the prevailing discourse, participants recognized it as a challenge to the legitimized view and accordingly discounted it as less legitimate or even biased. This study’s findings demonstrate how challenging it may be for a competing frame to make its way to the public who are resistant to alternative or peripheral perspectives.

Moderating Roles of Knowledge and Need to Evaluate

The effects of international news framing are nuanced and might not be contingent on personal characteristics and beliefs. Research indicates contrasting findings about the role of knowledge in framing: The effect is strong for more knowledgeable people (Nelson et al., 1997), or the effect is strong for less knowledgeable people (Haider-Markel & Joslyn, 2001; Kinder & Sanders, 1990). The null effect of knowledge in this study demonstrates that in framing effects knowledge per se may not be as crucial as opinions (need to evaluate).
The moderating effect of need to evaluate shows that participants who scored low on this measure were more influenced in the same direction by the doubt-framed news than the trust-framed news. In other words, if participants are low on need to evaluate and the news frame is unfavorable or hostile toward North Korea, the participants will harbor negative attitudes toward North Korea. In contrast, people who are predisposed to processing information with the end result of forming a judgment are set in their beliefs (Bizer et al., 2004) and therefore less affected by media framing. Individuals with strong opinions and high need to evaluate are less influenced by recent news frames, a finding also reported by Druckman and Nelson (2003).

With the wide spread of social media, people get international news such as the recent denuclearization summit between the United States and North Korea from both mass media and social media. But it is still important to understand how the media frames of the summit influenced the audience. This study demonstrates that doubt-framed stories are less likely to be argued against than the trust-framed stories, thus reinforcing a negative perception of North Korea in general and related policy issues (economic sanctions and diplomatic relationship). This study also contributes to the understanding of media framing by showing that individual characteristics (e.g., need to evaluate) moderate framing effects.

Limitations and Future Research

This experimental study relied on a student sample, which is not representative of the population at large. A student sample, however, provides a solid baseline for future research of a general population, and is acceptable in this case as the framing processes do not differ between student and nonstudent samples (e.g., Kühberger, 1998). Another limitation is that the experiment did not control for the participants’ own use of mass media and social media. It is possible that participants’ prior news exposure could have influenced their responses more heavily than the experimental stimulus. But the preexperiment survey, randomization, and the control group helped minimize any effect of prior exposure (Suresh, 2011). Randomization also reduced the possibility of participants’ existing attitudes toward North Korea and Kim Jong Un influencing the dependent variable.

This study could be expanded by future research in several ways: employing a more representative sample to increase generalizability, testing whether the findings hold up for less contentious international issues, and considering both media and individual frames.

References


