Effectiveness of Politicians’ Soft Campaign on Twitter Versus TV: Cognitive and Experiential Routes

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An experiment (N = 183) investigated (a) if individuals respond differently to politicians’ Twitter messages and their TV interview, and if so, (b) what cognitive and experiential processes account for such differences. Participants viewed either a segment of a TV talk show, wherein a female politician conversed with the hosts about her personal life and political philosophy, or her Twitter page containing identical messages. Exposure to her TV interview (vs. Twitter page) heightened social presence, inducing stronger parasocial interaction (PSI) and more favorable candidate evaluations among those lower in need for cognition (NFC), but the opposite was true for high NFCs. The candidate’s TV interview prompted less source-related thoughts, but more counterarguing among those holding unfavorable attitudes, thereby lowering PSI.

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Heralded as one of the fastest-growing social media worldwide, Twitter has been widely adopted by politicians to make connections with the electorate, disseminate their policy statements, and mobilize their supporters (Lassen & Brown, 2011). Especially in South Korea, politicians have been at the forefront of the adoption of this microblogging service, such that the incumbent party even developed “Twitter Influence Index” and used it as a criterion when nominating general election candidates. Despite Twitter’s immense popularity and wide use, however, it remains understudied how Twitter compares to more traditional campaign venues, and more importantly, what explains such medium effects, if any.

In the realm of political campaigns, it is well acknowledged that the candidate’s personality or image has taken precedence over job qualifications or issues in the public’s evaluation of politicians (Langer, 2010). This ever-increasing prevalence of personality-driven, “soft” campaigns has often been attributed to the dominance of TV as a source of political information, as opposed to print media (Keeter, 1987). However, just as television “provides the candidate as a person” (Keeter, 1987,
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p. 345), politicians seem to use social media to present themselves as relational objects voters can personally associate with. For example, politicians across countries (United Kingdom, Canada, South Korea) commonly tweet about personal content as well as their ongoing activities to appear as down-to-earth human beings and get closer to voters (Jackson & Lilleker, 2011; Park, 2010; Small, 2010). Albeit concerned with a different platform, voters’ comments on politicians’ MySpace profiles were mostly personal in content (Postelniciu & Cozma, 2007) and the desire for social interaction with the candidate and other supporters was the most significant motivation to visit politicians’ sites (Ancu & Cozma, 2009).

Although both TV and Twitter appear to highlight politicians’ personal qualities rather than their job qualifications or issue standings, they might still differ in their relative effectiveness as a campaign channel. To explore (a) how TV and Twitter compare in their ability to elicit positive public responses and (b) through what psychological mechanisms, the current research focused on two potential mediators, capturing the message recipients’ experiential state and cognitive processes. First, considering the benefits of direct communication between political candidates and citizens as a means to narrow the psychological distance and build rapport (Bimber & Davis, 2003), the extent to which a given medium is perceived to approximate an interpersonal face-to-face encounter with the candidate (i.e., social presence; Biocca, Harms, & Burgoon, 2003; Lee & Nass, 2005; Nowak & Biocca, 2003) might play an important role in shaping the public’s reactions. Second, if cognitive responses to the message, either bolstering or counterarguing its content, determine its impact (Petty & Cacioppo, 1986; Xu & Wyer, 2012), the campaign will become more or less effective depending on how much people engage in counterarguing when viewing the candidate’s messages on each medium. Therefore, this study aimed to investigate (a) how much people feel as if they were conversing one-to-one with the candidate, (b) how actively they engage in counterarguing when exposed to the candidate’s messages through each medium, and (c) how such cognitive and experiential reactions affect their evaluations of the candidate. In so doing, the message recipients’ cognitive tendency (i.e., need for cognition; NFC, Cacioppo & Petty, 1982) as well as their prior attitudes toward the target were considered as potential moderators of channel effects.

Experiential route to campaign effects: Social presence

One of the most elusive constructs in computer-mediated communication (CMC), social presence has long been at the center of scholarly discussion. In what is now a classical definition, Short, Williams, and Christie (1976) conceptualized social presence as “the degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships” (p. 65) and operationalized it in terms of how “sociable, warm, sensitive, and personal” (p. 66) people perceive the communication medium to be. Although the original definition centers on individuals’ judgments of the social capability of a medium, its scale has been widely used to measure individuals’ perceptions of mediated partners, including nonhuman
entities like virtual agents (Lee & Nass, 2002). At the same time, other researchers have underscored perceived immediacy of the interactants as the core element of social presence and defined it as how strongly a person feels as if she were “with” the communication partner in a given situation (Biocca et al., 2003; Lee & Nass, 2005). Albeit less prominent in the CMC literature, Korzenny’s (1978) electronic propinquity, also referred to as “electronic presence” (p. 7), similarly concerns the perceptions of both spatial and temporal nearness in mediated interaction, and was hypothesized to predict communicative satisfaction and task accomplishment.

Thus far, several factors have been proposed as determinants of social presence in CMC, but two medium-related factors seem to have attracted the greatest amount of attention: (a) channel bandwidth and (b) feedback capability. Along with the ability to convey multiple sensory cues, for example, media richness theory lists the ability to provide immediate feedback (Daft & Lengel, 1986) as one of the key determinants of media richness, with face-to-face interaction offering the richest information of all. Although it highlights the joint function of multiple factors beyond fixed properties of the medium, electronic propinquity theory also treats the bandwidth of the medium and mutual directionality as major predictors of psychological proximity (Korzenny, 1978; Korzenny & Bauer, 1981). These two factors seem to be particularly relevant to the current comparison between TV and Twitter for their relative effectiveness as a campaign venue, because depending on which factor takes precedence over the other, opposite predictions can be derived.

On the one hand, unlike TV shows that are transmitted in a one-sided manner, allowing no immediate feedback from the audience, Twitter enables people not only to “follow,” but interact with celebrities they do not normally run into. As such, even when they are not actually engaging in reciprocal message exchange with the candidate at the moment, reading the candidate’s responses to other followers’ posts may well remind people that they can speak directly to him or her, if they would like. Considering that (a) interactivity refers to “the extent to which source and receiver are interchangeable roles” and “the ability to influence the presentation of content” (Walther, Gay, & Hancock, 2005, p. 640) and (b) interactivity positively predicts presence (Lombard & Ditton, 1997; Steuer, 1995), such awareness of the interaction potential may foster the illusory perception of face-to-face conversation with the candidate. In fact, studies have confirmed the hypothesized link between interactivity and presence, such that perceived feedback was positively associated with psychological propinquity (Korzenny & Bauer, 1981) and users felt stronger social presence of the computer agent when allowed to determine the order of message presentation (Skalski & Tamborini, 2007). In a similar vein, if more structured communication with a larger number of rules for interactants to follow lowers perceived propinquity (Korzenny, 1978), a TV talk show featuring a carefully orchestrated and potentially scripted interaction between the candidate and the hosts, created in compliance with various rules and regulations governing its production, might suppress social presence.
On the other hand, TV affords a higher level of sensorial richness and presents a more vivid image of the communicator than Twitter, attributes which were predicted to foster (social) presence (Short et al., 1976; Steuer, 1995). Consistent with the cues-filtered-out perspective, when four different modes of CMC were compared (text-chat, audio, audio-video, avatar), those in the text-chat condition reported the lowest level of intimateness and co-presence (Bente, Rüggenberg, Krämer, & Eschenburg, 2008). In keeping with the notion that television affords more expressive and presentational communication via visual and nonverbal cues than written text does (Meyrowitz, 1985), Pfau and his colleagues have also argued that TV creates “the perception of direct contact between source and receivers” that resembles the interpersonal context (Pfau & Rang, 1991, p. 116) and encourages “the impression of being socially present” (Pfau, 1990, p. 198).

The extent to which cue richness fosters the imagined presence of the remote partner, however, is likely to hinge on receiver characteristics, among others. Consistent with electronic propinquity theory, which enlists users’ communication skills as a factor conducive to psychological proximity in mediated interaction (Korzenny, 1978), Walther and Bazarova (2008) found that those with strong communication skills managed to achieve similar levels of propinquity even with lower-bandwidth media in relative bandwidth deprivation. Similarly, while examining how communication modality (print vs. audio-visual) affects the degree of cognitive and emotional immersion in a narrative (i.e., transportation), Green et al. (2008) incorporated NFC (Cacioppo & Petty, 1982) as a potential moderator. Because it is cognitively demanding to mentally imagine the scene based solely on the verbal descriptions in a print medium, they reasoned that those less inclined to engage in cognitive efforts would be more transported into the story when watching a film than reading a novel, whereas the opposite would be true for those who enjoy cognitive activities. Results confirmed their prediction, leading to the conclusion that matching the medium with the desired level of cognitive engagement facilitates transportation. Considering that “the idea of feeling as if one is part of a narrative world is a common core that presence and transportation share” (Green et al., 2008, pp. 513–514), similar effects may emerge for social presence; that is, high NFCs may experience stronger social presence while viewing the candidate’s Twitter page than her TV interview, whereas low NFCs may show the opposite tendency. Due to the competing theoretical possibilities of the medium effect (interactivity vs. channel capacity) and the paucity of previous research to inform specific predictions, the first research question addressed if and, if so, how NFC moderates the effects of communication channel on social presence (RQ1).

Heightened presence of the candidate, in turn, might affect individuals’ perceptions and evaluations of the candidate. First, by making the mediated experience seem more real, social presence may enhance parasocial interaction (PSI) with the target (Lombard & Ditton, 1997), fostering such feelings as imagined intimacy, personal interest, and attributional confidence (Rubin, Perse, & Powell, 1985). Just as media personalities can establish intimate relationships with crowds of strangers...
by mimicking the informal conversational style of face-to-face encounters (Horton & Wohl, 1956) and the listeners of call-in radio talk shows experience a sense of personal contact and fulfill their needs for interpersonal interaction in the absence of direct participation (Avery, 1990; Rubin & Step, 2000), the feeling of one-to-one conversation with the candidate might heighten PSI.

Second, increased social presence might also lead to more favorable overall evaluations of the target. Although social presence might seem like a descriptive, rather than evaluative, construct, which reflects how closely an individual judges the mediated interaction to approximate face-to-face conversation, studies have suggested otherwise. For example, perceived co-presence of the CMC partner was positively associated with perceived trustworthiness (Bente et al., 2008) and increased presence of the interactive computer agent prompted more positive thoughts about it, regardless of its physical attractiveness (Skalski & Tamborini, 2007). Directly germane to the current research, Lee and Shin (2012) varied the level of interactivity in a politician’s Twitter communication by altering the proportion of his responses to followers’ questions to his monologic tweets. They found that (a) exposure to the high-interactivity (vs. low-interactivity) Twitter page induced stronger social presence and (b) heightened social presence yielded more positive overall evaluations of and stronger vote intention for the candidate, albeit only among those lower in affiliative tendency. By examining if heightened social presence enhances PSI (H1a) and overall evaluations of the candidate (H1b), this study aimed to assess the generalizability of their findings.

Cognitive routes to campaign effects: Source-thoughts and counterarguing

Another route through which communication channel might affect the campaign outcomes concerns message processing. When it comes to the question of how people process messages differently depending on the medium, previous research has focused mostly on communication modality as an explanation for inter-media differences, generally suggesting that written text facilitates message elaboration and recall, whereas audio-visual media encourage greater processing of communicator cues and amplifies their impact (e.g., Chaiken & Eagly, 1983; DeFleur, Davenport, Cronin, & DeFleur, 1992; Sparks, Areni, & Cox, 1998). For example, participants who had watched a video or listened to an audio track listed more source-related thoughts than those who had read the same message, and communicator likability had a significant effect on persuasion only in the broadcast modalities (Chaiken & Eagly, 1983). Likewise, source credibility was the most powerful predictor of persuasion effectiveness in television communication, whereas content overrode source credibility in print communication (Pfau, 1990).

If audio-visual mode highlights the source and thus accentuates the effects of source characteristics on persuasive outcome, the candidate’s TV interview might direct the viewers’ attention to the candidate and prompt more source-related thoughts (H2a). Moreover, it might also amplify the effects of the participants’ prior
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attitudes (liking) on PSI ($H2b$) and overall evaluations of the candidate ($H2c$). That is, as they come to have more thoughts about the candidate’s personal qualities and her private life, those with favorable initial attitudes about the candidate might experience stronger PSI and evaluate her more positively, whereas those unfavorably disposed toward the target may exhibit even more negative reactions.

At the same time, communication channel might also facilitate counterarguing behavior independently and/or jointly with receiver factors. First, if (a) counterarguing involves active processing of the message and (b) written text facilitates message elaboration (Petty & Cacioppo, 1979; Wheeler, Briñol & Hermann, 2007), people might find it easier to retrieve or generate contradictory information to refute the candidate’s self-promotional claims when reading her Twitter messages than watching her TV interview. In addition, given that those exposed to the high campaign-to-user interactivity website with features enabling user contact with the candidate (e.g., an onsite poll, a “contact us” email link) spent more time on the site and recalled the issues better than those presented with the low-interactivity website without such features (Warnick, Xenos, Endres, & Gastil, 2005), it seems probable that the potential for Twitter-enabled direct interaction with the candidate will enhance readers’ cognitive engagement, thereby facilitating counterarguing.

Such medium effect, however, might not be universally found across the board. First, considering that high NFCs enjoy cognitive activities and exhibit more active counterarguing than low NFCs (Haugtvedt, Petty, & Cacioppo, 1992), they might show consistently high levels of counterarguing, regardless of the communication channel, whereas low NFCs remain more susceptible to the channel effect. Alternatively, just as participants with high content-involvement generated more counterarguments than those with low content-involvement when reading the print advertisement, but not when listening to the radio broadcast (Wright, 1974), the inability to control the flow of information when watching the candidate’s TV interview might impede active message processing among high NFCs and thus suppress dispositional differences, which is less likely with Twitter. Second, even if Twitter facilitates cognitive activity, it is more likely to trigger counterarguing among those negatively predisposed toward the target in the first place. That is, those with favorable attitudes toward the candidate would not attempt to refute her claims just because the medium allows more active message processing.

On the other hand, normative expectations people bring in might also affect how likely they are to engage in counterarguing, specifically along the traditional bifurcation between mass and interpersonal communication. Interpersonal and mass communication have been typically divided on the basis of (a) channel type (mediation vs. nonmediation), (b) the number of message recipients, and (c) the potential for feedback, but the interactivity of new media, or the ability to change the course of communication, may render mediated communication much like an interpersonal encounter, despite their potential to reach a mass audience (Reardon & Rogers, 1988). Such conceptualization of interpersonal communication mirrors Schudson’s (1978) conversational ideal, which underscores spontaneous, reciprocal,
and egalitarian message exchange between individuals. Although no research has examined where on the interpersonal-mass communication continuum Twitter falls, the uses and gratifications research on Twitter has identified self-documentation and self-expression as primary motivations of Twitter use, along with relationship building/maintenance and information sharing (Liu, Cheung, & Lee, 2010; Shim & Hwang, 2010), suggesting that people generally take Twitter as an interpersonal or “social” medium through which users’ personal experiences are shared within their online network. If mass communication is “assumed to be less sincere” than interpersonal communication (Beniger, 1987, p. 361), people might become more skeptical and suspicious of the candidate’s sincerity when watching her personal disclosure on TV than when reading the identical messages on her Twitter page. Although they did not invoke this mass-interpersonal contrast, Worchel, Andreoli, and Eason (1975) offered two explanations for why television was less effective than the written text for the distrusted communicator (a political candidate): (a) the live quality of TV might have generated greater pressure toward attitude change and aroused greater psychological reactance, and (b) the candidate’s TV footage might have evoked more active counterarguing. The present study aimed to validate these possibilities by investigating how communication channel (RQ2a), in conjunction with the individuals’ NFC (RQ2b) and prior attitudes (RQ2c), affects the extent to which they engage in counterarguing in response to a politician’s self-promotional messages, and how counterarguing influences PSI with (RQ2d) and overall evaluations of the candidate (RQ2e). Figure 1 presents the proposed moderated mediation model with the research questions and hypotheses specifying causal pathways of the effects of communication channel.

Figure 1  Moderated mediation model of communication channel effects on PSI and overall evaluation.
Method

Participants
A total of 183 participants (90 men, 93 women; age $M = 38.90$, $SD = 10.57$) were recruited through an online survey company in South Korea. Email invitations were sent out to the national research panel and upon visiting the study website, participants were asked (a) if they were currently using Twitter and (b) if they had watched the TV talk show from which the study material was excerpted. To rule out the contaminating effects of (a) their attitudes about Twitter and the TV program and (b) their prior exposure to the candidate’s Twitter page and the program, only nonusers who had never watched the TV show were allowed to take part in the study.

Experimental stimuli
To prepare the study materials, all TV talk shows broadcast during the past 3 years that featured a politician as the main guest were thoroughly reviewed. Among them, SBS TV’s “Healing Camp” featuring Geun-hye Park, the daughter of former military president Jung Hee Park and the presidential candidate of the conservative ruling party, was selected. Hosted by two comedians and one actress, the show positions itself as a place wherein the guest can freely speak about his or her personal life, career, and social issues in a relaxed atmosphere. This particular episode was chosen because (a) it contained several short responses of the candidate that centered on different topics and were thus easily convertible into discrete Twitter messages and (b) the message content was not too outdated.

The mock-up Twitter page (see Figure 2) consisted of the target politician’s profile picture and 10 messages ($M = 130.30$ characters, $SD = 11.92$). To ensure comparability to the TV condition, wherein Park’s comments were mostly given in response to the show hosts’ questions, 8 out of 10 tweets were presented as the candidate’s answers to her followers’ questions. For example, “Back in college, I eluded my bodyguards and snuck out of the back door to watch a movie and drink coffee by myself in a cafe. I came home late after riding around the city in a bus. RT@today Did you do anything out of the ordinary when you were in school? Perhaps something defiant . . .,” “I remember writing this phrase in my diary, ‘The busy bee has no time to mourn.’ That was what I believed in. I kept myself as busy as I could to overcome the sadness of losing my mother. RT@lop How do pull yourself together in hard times?” Her comments that did not directly involve the show hosts were presented as monologic tweets, such as “I believe the worst thing a politician can do is make a promise and not keep it. I believe trust is built by following through with even the smallest promises and continuing to do so.” To control for potential confounds, Twitter-specific information was blurred, such as the number of following/followers and the time stamp of each post.

Measures
Prior to the exposure to the study stimuli, participants were presented with several questions. After answering demographic questions, participants indicated (a) how
much they liked the target (1 = Dislike her very much, 7 = Like her very much; $M = 3.78$, $SD = 1.80$) along with other political leaders and (b) how they would identify their political orientation (1 = Very conservative, 11 = Very liberal; $M = 6.05$, $SD = 1.91$). Since preference for and/or familiarity with a medium can influence transportation (Green et al., 2008) and general interest in politics might also affect the participants’ responses, they also indicated how many minutes they spent on an average day using the Internet and TV. Responses were transformed to hours: using the Internet for news ($M = .72$, $SD = .59$), (b) using the Internet for things other than news ($M = 1.80$, $SD = 1.59$), (c) watching TV news ($M = .83$, $SD = .59$), and (d) watching other TV programs ($M = 1.63$, $SD = 1.29$).

To capture message processing, participants were given 3 minutes to list the thoughts that came across their mind while reading the text, immediately following the exposure to the experimental stimuli ($N = 528$) (Cacioppo & Petty, 1981; Skalski & Tamborini, 2007). After being trained together on the first 20 participants’ thought lists, two independent coders identified the thoughts relevant to the given text as well as the target. They then counted the number of source-related thoughts, defined as the participants’ personal feelings about the target as well as their thoughts about the target’s personal characteristics (e.g., “I always saw her as a cold and stiff woman, but now she seems like a lady next door,” “She may have succeeded in terms of her career, but not in terms of her overall life,” “She seems to speak in a calm and orderly manner”). Counterarguments were broadly conceptualized as refutational thoughts, such as questioning the target’s sincerity, pointing out the discrepancy between her

Figure 2  Screen snapshots of the Twitter page (left) and the TV show clip (right).
words and deeds, and criticizing her stance on a public controversy (e.g., “Actions speak louder than words. Anyone can say what she’s saying,” “Everything is so fake. I don’t like the fact that she’s running for political office when she can’t even take care of her family,” “Why won’t she respond to rational criticisms when she is aware of the problem and talking about solutions?”). Inter-coder reliability, computed using Cohen’s kappa (1960), was acceptable for all categories and scores were averaged: relevant thoughts ($\kappa = .90, M = 2.80, SD = 1.68$), source-related thoughts ($\kappa = .86, M = 1.83, SD = 1.51$), counterarguments ($\kappa = .93, M = .49, SD = .96$). The proportion of source-thoughts and counterarguments was computed by dividing the number of thoughts in each category by the number of relevant thoughts ($M = .62, SD = .38$ for source-thoughts, $M = .19, SD = .35$ for counterarguments).

Social presence was defined as the extent to which participants felt as if they were conversing with the politician while reading/viewing the study material (Lee & Nass, 2005; Nowak & Biocca, 2003): “I felt as if I were engaging in an actual conversation with her,” “I felt like I was in the same room with her,” “I felt as if she was speaking directly to me” ($1 = $Strongly disagree$, 7 = Strongly agree$; $\alpha = .95, M = 3.76, SD = 1.49$).

PSI entails the sense of friendship, mutual understanding, and personal interest and was measured using six items from the PSI scale, leaving out the items referring to a particular medium (Rubin et al., 1985; Rubin & Perse, 1987): “She makes me feel comfortable, as if I am with friends,” “I see her as a natural, down-to-earth person,” “I look forward to hearing more news about her,” “She seems to understand the kinds of things I want to know,” “I would like to meet her in person,” “I feel as if I have known her for a long time” ($1 = $Strongly disagree$, 7 = Strongly agree$; $\alpha = .96, M = 3.63, SD = 1.48$).

Overall evaluation of the candidate was measured by the items tapping on three sub-dimensions commonly used for political figures: competence, morality, and attractiveness (Rosenberg, Bohan, McCafferty, & Harris, 1986; Wyer et al., 1991). Participants rated the target on the following semantic differential scale: “unintelligent (1)—intelligent (7),” “incompetent—competent,” “has no leadership—has leadership,” “selfish—unselfish,” “immoral—moral,” “untrustworthy—trustworthy,” “dishonest—honest,” “unlikable—likable,” “unattractive—attractive.” Because a factor analysis yielded a single-factor solution (Eigen value = 6.36, % of variance accounted for = 70.67%), scores were averaged, with higher scores indicating more favorable evaluations ($\alpha = .95, M = 4.41, SD = 1.35$).

For NFC, 10 items for Rational Engagement in Rational-Experiential Inventory (Pacini & Epstein, 1999) were presented, which were derived from the original NFC scale (Cacioppo & Petty, 1982). For example, “I try to avoid situations that require thinking in depth about something,” “I enjoy intellectual challenges,” “I enjoy solving problems that require hard thinking,” “Thinking is not my idea of an enjoyable activity,” “I prefer complex problems to simple problems,” “Knowing the answer without having to understand the reasoning behind it is good enough.
Table 1 Descriptive Statistics and Intercorrelations of Key Variables

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<tr>
<td>1. Social presence</td>
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<td>1.49</td>
<td>.95</td>
<td>.02</td>
<td>- .44</td>
<td>.81</td>
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<td>2. Source-thoughts</td>
<td>0.62</td>
<td>0.38</td>
<td>.86</td>
<td>- .08</td>
<td>- .03</td>
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<td>3. Counterarguing</td>
<td>0.19</td>
<td>0.35</td>
<td>.93</td>
<td></td>
<td>- .47</td>
<td>- .29</td>
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<td>4. Parasocial interaction</td>
<td>3.63</td>
<td>1.48</td>
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<td>5. Overall evaluation</td>
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*p < .001.

for me” (1 = Strongly disagree, 7 = Strongly agree). After appropriate recoding, scores were averaged (α = .84, M = 4.50, SD = .78).

Analysis

All research questions and hypotheses were examined simultaneously with structural equation modeling (SEM) with maximum likelihood estimation, using Mplus 6.11 (Muthén & Muthén, 1998–2010). As shown in Figure 1, this structural model specified communication channel as an independent variable (IV: Twitter = 0, TV = 1), PSI and overall evaluations of the candidate as dependent variables (DVs), and social presence, source-related thoughts, and counterarguing as mediators operating in parallel (Table 1). Residual correlations among the mediators were estimated (Preacher & Hayes, 2008). IV and other background variables (gender, NFC, prior attitudes toward the candidate, political orientation, and media use variables) were treated as common predictors for all dependent and mediator variables. The proposed moderated relationships were modeled using product terms: IV × NFC, IV × prior attitudes, source-thoughts × prior attitudes. Continuous variables were mean-centered before forming the product terms. A correlation between the residual of source-thoughts and the source-thoughts × prior attitudes product term was entered into the model to ensure that the correlations between the interaction term and its components were perfectly reproduced. For indirect effects, bias-corrected confidence intervals were computed based on asymmetric bootstraps with 5,000 bootstrap replicates (Preacher, Rucker, & Hayes, 2007).

Results

Model fit was examined using a variety of indices. The overall chi-square test of model fit was statistically nonsignificant, \( \chi^2(9) = 8.38, p = .50 \). The comparative fit index (CFI) was 1.00. The root mean square error of approximation (RMSEA) was less than .001, and the p-value for the test of close fit was .78. The standardized root mean square residual (SRMR) was .01. In sum, the indices consistently point towards a good model fit to the data.

Figure 3 summarizes our moderated mediation model results. For RQ1, there was a significant interaction effect between communication channel and NFC on
social presence, $b = -0.73$, 95% CI $[-1.20, -0.25]$. As shown in Figure 4 (left), for low NFC individuals (one SD below the mean), the candidate’s TV interview induced stronger social presence than her Twitter page did, $b = 0.60$, 95% CI $[0.08, 1.12]$, whereas high NFC individuals (one SD above the mean) showed the opposite reaction, $b = -0.53$, 95% CI $[-1.05, -0.01]$. Consistent with both $H1a$ and $H1b$, social presence was positively associated with PSI, $b = 0.58$, 95% CI $[0.49, 0.66]$, and overall evaluations of the candidate, $b = 0.25$, 95% CI $[0.13, 0.36]$. Taken together, exposure to the candidate’s TV interview (vs. Twitter page) yielded higher PSI through heightened social presence for low NFCs, $b = 0.35$, bias-corrected bootstrap 95% CI $[0.05, 0.68]$. For high NFCs, however, the indirect effect of communication channel on PSI through social presence failed to reach statistical significance, $b = -0.30$, bias-corrected bootstrap 95% CI $[-0.62, 0.01]$. Communication channel had significant indirect effects on overall evaluation for both low and high NFCs, but in opposite directions; that is, low NFCs rated the candidate more favorably after viewing her TV interview (vs. Twitter page), $b = 0.15$, bias-corrected bootstrap 95% CI $[0.02, 0.36]$, whereas high NFCs evaluated her more positively after viewing her Twitter page, $b = -0.13$, bias-corrected bootstrap 95% CI $[-0.31, 0.01]$.

$H2a$ predicted that participants would have more source-thoughts while watching the TV interview, but those exposed to the TV clips were less likely to list source-related thoughts than those presented with the Twitter page, $b = -0.16$, 95% CI $[-0.27,
Moreover, source-centered processing did not amplify the effects of prior attitudes, either on PSI, \( b = -0.04, 95\% \text{ CI } [-0.19, 0.11], \) or source evaluation, \( b = 0.09, 95\% \text{ CI } [-0.12, 0.30]. \) Therefore, neither \( H2b \) nor \( H2c \) was supported.

With respect to counterarguing, the candidate’s TV interview prompted more active counterarguing than her Twitter messages (\( RQ2a \)), \( b = 0.12, 95\% \text{ CI } [0.02, 0.21] \), but such effect was qualified by the participant’s prior attitudes (\( RQ2c \)), \( b = -0.05, 95\% \text{ CI } [-0.10, -0.002]. \) As shown in Figure 4 (right), for those holding negative attitudes toward the candidate (one SD below the mean), the candidate’s TV interview elicited more counterarguing than her Twitter messages did, \( b = 0.21, 95\% \text{ CI } [0.08, 0.34]. \) By contrast, those favorably disposed toward her (one SD above the mean) showed no such differentiation, \( b = 0.02, 95\% \text{ CI } [-0.11, 0.15]. \) Meanwhile, communication channel had no significant interaction with NFC on counterarguing (\( RQ2b \)), \( b = 0.02, 95\% \text{ CI } [-0.10, 0.14]. \) Counterarguing, in turn, significantly lowered PSI with the candidate (\( RQ2d \)), \( b = -0.45, 95\% \text{ CI } [-0.77, -0.12], \) but had no effect on overall evaluations (\( RQ2e \)), \( b = -0.10, 95\% \text{ CI } [-0.56, 0.37]. \) Tests of conditional indirect effects established that the candidate’s TV interview was more likely than her tweets to stimulate counterarguing, thereby reducing PSI with the candidate for those with less favorable prior attitudes, \( b = -0.09, \text{ bias-corrected bootstrap } 95\% \text{ CI } [-0.26, -0.02]. \) For those holding positive attitudes about the candidate, communication channel had no significant indirect effect on PSI, \( b = -0.03, \text{ bias-corrected bootstrap } 95\% \text{ CI } [-0.09, 0.02]. \) However, the indirect effect of communication channel on candidate evaluation through counterarguing was not significant for those with either unfavorable, \( b = -0.02, \text{ bias-corrected bootstrap } 95\% \text{ CI } [-0.15, 0.08], \) or favorable prior attitudes, \( b = -0.04, \text{ bias-corrected bootstrap } 95\% \text{ CI } [-0.13, 0.02]. \)

Lastly, as a robustness check, a model without nonsignificant interaction terms (i.e., “\( IV \times NFC \)” for counterarguing and “source-thoughts \times \) prior attitude” for PSI and overall evaluation) was tested. The findings remained virtually unchanged,
suggesting that the observed moderated mediation effects are not statistical artifacts resulting from the presence of those nonsignificant interaction terms in our model.

**Discussion**

This research demonstrated that people respond differently to a politician’s messages depending on the channel through which they encounter them and identified two different routes through which such channel effects occur. Specifically, low NFC individuals were more likely to feel as if they were directly conversing with the candidate when watching her TV interview than reading her tweets, whereas high NFC individuals showed just the opposite tendency. Heightened social presence, in turn, fostered the illusion of interpersonal intimacy with the candidate and yielded more positive evaluations of her. On the other hand, the candidate’s TV interview (vs. Twitter messages) facilitated counterarguing among those holding less favorable attitudes toward her, which led to lower levels of PSI with the candidate. Exposure to the candidate’s Twitter page encouraged person-centered message processing, but heightened source salience did not amplify the effects of the participant’s prior attitudes on affective reactions.

**Theoretical implications**

On the basis of the facts that (a) television provides close access to nonverbal cues, like the communicator’s facial expressions, and that (b) people typically watch television in their home, a personal and intimate context, Pfau and Rang (1991) have argued that television affords the perceptions of intimacy with the communicator “unattainable via any other communication modality except for interpersonal” (p. 115). Consistent with this view, watching the candidate’s TV appearance enhanced PSI with her, as compared to reading her tweets, but such effect was found only among less cognitively active individuals, suggesting an important boundary condition. What is more, the channel effect was even reversed for high NFC individuals. Replicating Green et al.’s (2008) findings that low NFCs were more prone to transportation into the story world when watching a film, whereas high NFCs were transported more when reading a written text (Green et al., 2008), low NFCs felt stronger presence of the candidate while watching her TV interview, but high NFCs reported higher levels of social presence when reading her Twitter conversation with others. More than anything else, these findings indicate that structural properties of the medium, such as channel capacity and interactivity, are not the only, or even the most important, determinant of social presence, and call our attention to the question of what nonmedium factors render mediated interaction more or less like a face-to-face encounter.

At the same time, it deserves note that the candidate’s TV interview had negative effects on PSI by stimulating counterarguing among nonsupporters. That is, the candidate’s appearance on a show was more likely to raise suspicions about her true intention and generate refutational thoughts among those unfavorably predisposed toward her, reinforcing their negative impressions of her. Several possibilities were
entertained to explain why. First, the “live” quality of television might have imposed greater pressure toward attitude change and aroused stronger psychological reactance (Worchel et al., 1975) among those less fond of the candidate. Aside from the ambiguity as to what exactly the “live” quality refers to, the findings that (a) the candidate’s TV interview actually lowered the illusory feeling of “live” conversation with her (i.e., social presence) among high NFCs and (b) participants engaged in more source-centered message processing in response to her Twitter messages seem to challenge this explanation. Second, given that counterarguing involves active processing of the message content (Wheeler et al., 2007), the candidate’s TV interview might have drawn greater attention and induced higher levels of involvement by virtue of its vividness, thereby fostering counterarguing. Perhaps, because participants were not using Twitter, they might have been less motivated and/or able to systematically process the candidate’s Twitter messages than her TV clips. Albeit plausible, there was no significant channel effect on the number of relevant thoughts, \( t(181) = 1.27, p = .21 \), suggesting that counterarguing did not stem directly from greater cognitive engagement per se. Lastly, people might have perceived mass communication to be less sincere than interpersonal communication (Beniger, 1987), and thus, became more skeptical of the candidate’s hidden motives and her genuineness when exposed to her TV interview, although such disbelief would have been suppressed among her supporters. Although no direct evidence can be gleaned from the current data, the finding that the participants’ message processing was more source-centered in the Twitter condition seems to comport well with this Twitter-as-interpersonal-medium account.

The fact that participants had more source-thoughts when viewing the candidate’s Twitter messages than her TV interview runs counter to the previous research documenting heightened attention to and greater impact of communicator cues (e.g., likability) on subsequent decisions in response to videotaped than written messages (Chaiken & Eagly, 1983; Worchel et al., 1975). Granted, the classical contrast between message and source seems somewhat unfitting in the present context, as most of the messages were concerned with the candidate’s personal stories and life episodes. Notwithstanding, it demands an explanation for why the identical messages triggered different thought processes in a way opposite to the modality-based prediction. In this regard, the recent finding that those exposed to a politician’s Twitter page listed more source-related, but fewer issue-related thoughts than those who had read his newspaper interview (Lee & Shin, in press) might be relevant. Even though the modality was held constant, participants processed the politician’s Twitter messages in a more person-centered manner than they did his interview article, suggesting that factors other than modality contribute to inter-media differences in cognitive reactions. Individuals’ expectancies, both predictive and prescriptive, about how appropriate the medium is for interpersonal communication might be one such factor, which awaits further investigation.

Increased cognitive salience of the communicator, however, did not accentuate the impact of the participants’ prior attitudes on candidate evaluation or PSI with the
candidate. One possibility for this null interaction pertains to attitude strength. Unlike unknown communicators whose likability was experimentally induced (Chaiken & Eagly, 1983), the target politician was the frontrunner in the 2012 presidential race. As such, participants were likely to hold a relatively stable attitude toward her, which had robust main effects on both DVs, leaving little room for further variation by additional factors. In fact, when the participants were trichotomized based on their attitudes (like vs. neutral vs. dislike), only 24.6% of the participants belonged to the neutral category, while the remaining participants were equally divided into either like or dislike groups (37.7% each). Had a fictitious candidate been used and his or her likability been experimentally manipulated, its effects might have varied depending on how salient the source was.

Although it is conceivable that the target may become more cognitively salient when people feel they are “with” her (Biocca et al., 2003), the current results indicated statistically nonsignificant residual correlation between social presence and source-thoughts, \( r = .12, p = .10 \). By contrast, the residual correlation between social presence and counterarguing was negative and significant, \( r = -.38, p < .001 \). Collectively, these results seem to suggest that social presence is a holistic concept that encapsulates the individual's subjective experience in its entirety with positive connotations attached, which cannot be equated with the cognitive prominence of the source. Rather than a descriptive construct reflecting individuals’ perceptions of spatial closeness in a mediated interaction, social presence appears to embody emotional closeness and social relatedness (Bente et al., 2008). As the hyperpersonal communication model suggests (Walther, 1996), face-to-face communication might not always outperform CMC in terms of relational outcomes, but the “feeling” of direct conversation, however illusory it is, still seems to play a crucial role in yielding positive affective reactions to the communicator.

**Limitations and future directions**

This research aimed to advance our understanding of how the public’s reactions to politicians’ Twitter communication differ from those to a more traditional form of mediated contact with them, and why such differences occur. Several factors seem to limit the generalizability of the current findings, though. First, due to the limited availability of TV programs featuring a politician whose content can be converted into Twitter messages with some degree of plausibility, only one politician was used with a fixed set of messages, demanding replication studies with other politicians and other TV programs. Second, as an exploratory attempt to examine the effectiveness of Twitter as a communication medium, I recruited only nonusers, as preference for and/or familiarity with the medium can influence cognitive and affective immersion in the text (Green et al., 2008). Given the cross-over interaction between communication channel and NFC on social presence, however, it seems worth examining how Twitter users respond to politicians’ tweets compared to their TV appearance, or other forms of media presentations. For example, considering that those with strong communication skills were able to compensate for the deficiency in
media bandwidth and experienced similar levels of propinquity (Walther & Bazarova, 2008), low NFCs who reported lower social presence in the Twitter than TV condition might not show such reactions as they gain more experience with Twitter and its conventions. Lastly, the specific ways and the extent to which politicians utilize Twitter for their election campaigns, as well as public perceptions of the medium, might vary across national boundaries. As such, future research using samples from other countries seems to be in order to ensure generalizability.

Concerned primarily with what seems to be ever-rampant soft campaign efforts in the political arena, this study employed messages dealing mostly with personal matters. However, had more policy-oriented messages been included, like the candidate’s stance on public controversy, and a comparison of the number of issue-related thoughts with that of source-related ones been made, a more complete picture could have been portrayed as to how each medium triggers different message processing. Constrained by available TV shows featuring a politician, it was impossible to systematically vary the message content, but future research should explore various ways in which the message content might interact with the medium.

Unlike the TV talk show wherein the candidate conversed with the celebrity show hosts, Park’s Twitter page featured her interaction with lay citizens, which could have fostered the impression that she strives to stay connected with the voters. Although Utz (2009) found that people expressed more favorable attitudes toward the candidate who responded to the voters’ comments on his SNS page than the one who did not, the mere awareness of the politician’s endeavor to engage in reciprocal interaction with ordinary people did not automatically elude positive public reactions. Quite contrarily, those lower in NFC responded more negatively to the candidate’s Twitter communication through lowered social presence. Because this study was designed to explore if any channel differences exist, it remains unclear exactly what particular properties of Twitter and TV, both objective and perceived, are responsible for such divergent reactions. By (a) employing multiple TV shows with different formats (e.g., presence vs. absence of studio audience, live vs. recorded) and varying the ways in which Twitter is utilized (e.g., one-way publicity channel vs. two-way communication channel) as well as (b) measuring individuals’ normative expectations about each medium, researchers should elucidate what specific attributes account for inter media differences observed herein.

Lastly, PSI was proposed as another DV in this study, because the PSI scale (Rubin et al., 1985; Rubin & Perse, 1987) reflects general impressions of and illusory friendship toward the target, making it impossible to determine the temporal sequence between PSI and overall evaluations of the candidate. However, a recent development of Experience of Parasocial Interaction Scale (EPSI) (Hartmann & Goldhoorn, 2011), which taps one’s temporary perceptions of how much a TV performer is aware of, attentive and responsive to him or her, offers an alternative measure of PSI that is truer to its original conceptualization. When PSI is operationalized as the media user’s transient experiential state during the media exposure, akin to the way social
presence was defined here, it might well serve as an important mediator that explains the psychological mechanism underlying channel effects.

Conclusion
Despite some ambiguity as to why certain effects occurred, the current research showed that (a) no single technical property of the medium, either interactivity or cue richness, accounts for the extent to which media users experience the presence of the mediated communicator, as participants responded to different medium features depending on their cognitive proclivities, (b) social presence entails a positive communicative experience, not reducible to the cognitive salience of the communicator, and (c) Twitter focuses individuals' attention on the communicator, and yet, suppresses distrust and skepticism among negatively predisposed individuals, possibly due to its status as a “social” or “interpersonal” medium to which people accord superiority over mass communication as an ideal form of human communication (Schudson, 1978). If open acknowledgement of and direct address to the audience serve to disguise mass communication as interpersonal, thereby enhancing its credibility and persuasiveness (Beniger, 1987), politicians’ Twitter communication might do just that. In that sense, the proliferation of Twitter-based campaigns as we witness today may be none other than an exemplary case of mass-directed “pseudo-communal communication” (p. 366), “a hybrid of interpersonal and mass communication born largely of computer technology” (p. 369) problematized more than 2 decades ago.

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References


