Illusions of Knowledge: 
Media Exposure and Citizens’ Perceived Political Competence

MATHIAS WEBER
CHRISTINA KOEHLER
Johannes Gutenberg University of Mainz, Germany

Citizens’ willingness to participate in politics is contingent on not only factual political knowledge but their subjective perceptions of competence. We argue that media exposure influences such subjective perceptions as being knowledgeable and capable of judging political issues. More specifically, we assume that incomprehensible news items impair people’s perceived political competence, while comprehensible news items strengthen citizens’ perceived knowledge and power of judgment without necessarily contributing to political learning. An online experiment reveals that cognitive style moderates the assumed relationship. Participants with a high need for cognition (NFC) feel more competent when confronted with a comprehensible news item; for participants with a low NFC, reading a less comprehensible news item resulted in a more pronounced sense of competence.

Keywords: political knowledge, perceived political competence, perceived knowledge, media exposure, comprehensibility, need for cognition

Even the most divergent theories of democracy have (at least) one common ideal: They all rest on the widely informed, rationally deciding, and politically knowledgeable citizen (Neuman, 1986; Popkin & Dimock, 1999; Schudson, 1998). According to this ideal, citizens need broad political knowledge—for example, on current political and economic issues, the government, and the democratic process—to become aware of their own political interests and successfully pursue them through effective participation (Delli Carpini & Keeter, 1996; Jung, Kim, & Gil de Zúñiga, 2011). However, the level of political knowledge in most Western democracies is permanently low; this is shown in numerous studies that evaluate citizens’ degree of factual knowledge on political issues and institutions (Bennett, 1988; Delli Carpini & Keeter, 1996; Hollander, 1995; Neuman, 1986; Neuman, Just, & Crigler, 1992; Paldam & Nannestad, 2000).

Despite this apparent lack of political knowledge, the democratic systems of most Western nations have been remarkably stable for decades (Delli Carpini & Keeter, 1996; Neuman, 1986)—even in the face of far-reaching political crises (Bermeo & Bartels, 2014). A prominent explanation for this paradox states that political participation is not primarily driven by factual knowledge, but that citizens

Mathias Weber: mathias.weber@uni-mainz.de
Christina Koehler: christina.koehler@uni-mainz.de
Date submitted: 2016–06–02

rather use heuristics and information shortcuts to decide about political issues (Delli Carpini & Keeter, 1996; Neuman, 1986; Popkin & Dimock, 1999, Schudson, 1998); however, heuristic decision making still requires that citizens feel sufficiently knowledgeable to form opinions on political issues even though they may lack factual political knowledge. This phenomenon can be referred to as an “illusion of knowledge,” meaning that people tend to overestimate their degree of political knowledge and act on what they believe to know rather than on what they actually know (Adoni & Cohen, 1978; Glenberg, Wilkinson, & Epstein, 1982; Jung et al., 2011; Park, 2001; Schneider & Laurion, 1993).

This study explores how media coverage can influence such subjective perceptions of political competence. More specifically, we shed light on how the mass media contributes to citizens’ feeling of being politically knowledgeable and capable of political judgment without necessarily contributing to actual political learning. We argue that the comprehensibility of political news plays a crucial role for inducing a sense of competence. Furthermore, we elaborate on the role of cognitive style (need for cognition, or NFC) in the relationship between media exposure and citizens’ perceived political competence.

**Citizens’ Perceived Political Competence**

More than factual knowledge, citizens’ subjective perception of their political competence is directly linked to political participation (Bennett, 1997; Caprara, Vecchione, Capanna, & Mebane, 2009; Gastil & Xenos, 2010; Kaid, McKinney, & Tedesco, 2007; Pollock, 1983). People will not spend time and effort on forming political judgments unless they believe that they are capable of pursuing the desired outcomes. In other words, people may perfectly understand the world of politics, but they will not participate if they do not feel able to do so (Caprara et al., 2009; general mechanism: Bandura, 1982). Accordingly, a lack of confidence in one’s political knowledge is a major reason for refraining from political participation and thus is detrimental to the democratic process (Kaid et al., 2007). The flip side to a lack of perceived political competence is the illusion of knowledge (Park, 2001): Here, citizens feel sufficiently knowledgeable about politics even though they lack the factual knowledge required for making informed decisions. Such a discrepancy between perceived and actual competence is regarded as detrimental for mass political decision making, too. If their factual knowledge is not as adequate as they assume, citizens risk acting in ways that do not best serve their interests (Kaid et al., 2007). Furthermore, it is possible that an illusion of knowledge keeps citizens from seeking additional information on political issues, since they already feel sufficiently informed (Hollander, 1995).

To understand how media usage may contribute to or deteriorate perceived political competence, we must analyze the information processes that shape this connection. Citizens’ perceived political competence can be understood as part of the superordinate concept of political efficacy. Political efficacy captures citizens’ confidence in their own ability to engage in the political realm and consists of two dimensions: external and internal political efficacy. The subjective perception of political competence may be regarded as a decisive component of internal political efficacy, which refers to a citizen’s “belief about one’s own competence to understand, and to participate effectively in politics” (Niemi, Craig, & Mattei, 1991, p. 1407; see also Bennett, 1997; Caprara et al., 2009; Pollock, 1983). However, citizens’ perceived political competence is not identical to internal political efficacy; in contrast to internal efficacy, citizens’ subjective perception of their own political competence does not capture other prerequisites for participation, such as
perceived communicative or technical skills. The subjective perception of one’s own competence is for evaluating whether one regards herself or himself as “well-qualified to participate in politics” (see Niemi et al., 1991, p. 1408, for the standard internal efficacy scale). Kaid et al. (2007) therefore refer to perceived political competence as “political information efficacy” in terms of “the voter’s confidence in his or her own political knowledge and its sufficiency to engage in the political process” (p. 1096; e.g., to judge policy options and to make informed voting decisions). Because political information efficacy directly refers to the perceived information input and processing, it is more specific than internal political efficacy.

We study the information processes that may explain how citizens’ perception of their own knowledge and capability to judge policy options is influenced by specific characteristics of news media coverage. We use perceived political competence as our main dependent construct because it captures exactly the phenomenon that we are interested in, whereas the broader concept of internal political efficacy could potentially mask the mechanisms of interest. In line with the theoretical argument of Kaid et al. (2007), we differentiate in our study between two dimensions of citizens’ perceived political competence: (1) people’s sense of the amount and broadness of information they believe they have regarding an issue and (2) its perceived sufficiency to judge policy options.

From an information-processing perspective, both a citizen’s perceived political knowledge and perceived capability for political judgment can be understood in terms of a citizen’s metacognitive evaluation of her or his elaboration during exposure to political information. Accordingly, the cognitive structure of information processing must be considered: Since cognitive psychology suggests that specific pieces of knowledge are organized into and processed via a net of broader knowledge domains (e.g., knowledge about capital taxes is embedded in the broader domain of tax regulations; Eveland, Marton, & Seo, 2004), the metacognitive evaluation of one’s level of knowledge (and its sufficiency to draw informed judgments on the respective issue) may differ between these levels of knowledge (specific vs. general). News media coverage is mostly concerned with single events and particular current developments that are tied to specific knowledge domains (e.g., reform of capital taxes). To be sensitive to the scope of potential effects of a single news item on a citizen’s perceived political competence—that is, whether it is restricted to the specific piece of information (e.g., on capital taxes) or extends to a broader knowledge domain (e.g., tax regulation in general)—we differentiate between different levels (specific vs. general) of a citizen’s perceived knowledge and capability to judge policy options.

Media Exposure and Perceived Political Competence

Although people are exposed to some political issues through personal experience (e.g., inflation through grocery shopping), developments on a macro level are almost exclusively conveyed through the mass media (Lippmann, 1922; Paldam & Nannestad, 2000). Media exposure is likely to influence how citizens perceive the quality and quantity of their information input regarding the political realm. Consequently, a causal relationship between media use in general (Gastil & Xenos, 2010; Jung et al., 2011), exposure to political late-night comedy (Baumgartner & Morris, 2006; Hoffman & Thomson, 2009), and internal political efficacy has been documented. However, since internal political efficacy is more general in nature, the specific connection between media exposure and citizens’ perceived knowledge acquisition, as well as their perceived capability to judge policy options, still needs to be addressed to
determine the specific role that media coverage plays in mass political behavior. This assertion is supported by several studies that show a significant relationship between media exposure and perceived political knowledge, which represents the foundation of perceived political competence (e.g., Adoni & Cohen, 1978; Hollander, 1995; Mondak, 1995; Park, 2001; Woo, Kim, & Kim, 2012); however, those results were mostly generated not by drawing on the theoretical background of citizens’ perceived efficacy but with the rationale that perceived political knowledge is an alternative or supplementary measure of factual political knowledge.

Political knowledge is usually operationalized either by factual measures (e.g., multiple-choice questions) or by asking people to self-evaluate their degree of political knowledge (e.g., Hollander, 1995; Woo et al., 2012). Park (2001) draws a direct comparison between media influences on these two measures and provides evidence that people believe that they acquire knowledge from media content, even though assessments of their factual knowledge prove them wrong. Mondak (1995) attained similar results in a quasi-experiment during a newspaper strike in Pittsburgh. On economic issues, Adoni and Cohen (1978) found that television viewing correlated more strongly with people’s perceived knowledge than with factual economic understanding. Additionally, perceived knowledge showed stronger associations with people’s willingness to form opinions on economic matters.

In sum, research on the role of media coverage in explaining citizens’ subjective perception of their own political competence either focused on the more general concept of internal efficacy and did not explicitly capture aspects of the informational input, or scholars investigated perceived political knowledge as a measure of factual knowledge acquisition. The specific impact of media exposure on citizens’ perceived political competence in terms of political information efficacy was only rarely at the heart of scientific interest: Kaid et al. (2007) found that viewing political ads significantly impacted young voters’ political information efficacy.

To broaden the theoretical substance and empirical applicability of political information efficacy, we follow Kaid et al.’s (2007) suggestion to extend our knowledge on the impact of media use on perceived political competence in two ways. First, we focus on journalistic content: Our study addresses news media, as opposed to persuasive political ads or debates during electoral campaigns. Second, instead of exploring exposure alone, we consider the characteristics of information processing that may explain how citizens’ perception of their own political competence is related to media usage (Cho et al., 2009; Eveland, Shah, & Kwak, 2003). We assume that this causal relationship is crucially influenced by the way individuals with different characteristics (i.e., cognitive style) process the information accounts (Cho et al., 2009; Eveland et al., 2003). Hence, we aim to shed light on the core of the causal process between media exposure and perceived political competence.

**Message Comprehensibility and Perceived Political Competence**

Recipients of a news item feel competent when they are able to easily process the message, because they tend to evaluate their own reasoning and reflections on a metacognitive level (Coutinho, Wiemer-Hastings, Skowronski, & Britt, 2005). The easier it is to process a message, the more positive this metacognitive evaluation (Begg, Duft, Lalonde, Melnick, & Sanvito, 1989; Petty, Brinol, & Tormala, 2002).
Research has identified various message factors that are thought to relieve or exacerbate information processing—for example, rhetorical questions (Howard, 1990) or graphics (Fox et al., 2004). However, the most obvious contributor to relieving information processing is the comprehensibility of a message (Kintsch, 1994).

Comprehending a message involves different cognitive processes: The recipient can grasp the content of a message cognitively and form a coherent and consistent mental representation of it. This mental representation is then integrated with previously acquired knowledge and enables the recipient to derive broader implications beyond the message content (Eveland et al., 2003; Kintsch, 1994). For example, if recipients understand a news item on a reduction of the European Central Bank base rate, they will probably be able to deduce consequences for their country’s national budget and for their personal bank rates. Consequently, the comprehensibility of a message elevates the ease and swiftness of creating a mental representation and helps to achieve a deeper understanding (Begg et al., 1989; Kintsch & Vipond, 1979). Comprehension differs immensely among individuals (Kintsch, 1994); however, research from an educational perspective has identified several textual factors that seem to enhance most people’s understanding, such as avoiding technical terms and abbreviations, using simple sentence structure, and the coherence of a message (Kintsch, 1994; Klare, 1974). These aspects are thought to generally enhance elaboration, relieve cognitive grasping, and thus foster a recipient’s perceived competence as well. We propose the following two hypotheses (see Figure 1):

**H1:** A more comprehensible news item (as compared with a less comprehensible one) fosters recipients’ perceived knowledge about the topic of the news item regardless of whether it actually provides them with (new) information.

**H2:** A more comprehensible news item (as compared with a less comprehensible one) indirectly fosters recipients’ perceived capability to judge policy options tied to the topic of the news item, mediated through recipients’ perceived knowledge.

---

**Figure 1. Theoretical model A.**
Cognitive Style and the Effect of Comprehensibility on Perceived Political Competence

The comprehensibility of political news is directly linked to information processing. However, recipients’ cognitive and motivational characteristics must also be considered when explaining the effects of media exposure on citizens’ perceived political competence. We focus in our study on the need for cognition as a potential moderating factor in the causal connection under analysis.

According to Cacioppo and Petty (1982), NFC refers to people’s dispositional preference to engage in and enjoy effortful cognitive activities. The concept proved to be a robust differentiator between people’s tendency to elaborate intensely and can be regarded as a proxy for a person’s cognitive style (Cacioppo, Petty, & Morris, 1983; Petty, Brinol, Loersch, & McCaslin, 2009; Petty et al., 2002). Because NFC describes the tendency to enjoy cognitively ambitious tasks, it seems plausible to assume that it is related to acquiring political knowledge through media as well (Liu & Eveland, 2005). Although people with low and high NFC are comparably likely to select political news, they differ in how they process the content of political news (Gangadharbatla, Bright, & Logan, 2014; Tsfati & Cappella, 2005).

In general, people with high NFC tend to elaborate on a message more thoroughly and extensively than people with low NFC, who tend to rely more on peripheral cues. However, NFC is motivational in character and thus distinct from cognitive ability (Cacioppo, Petty, Feinstein, Jarvis, & Blair, 1996; Cacioppo, Petty, Kao, & Rodriguez, 1986). Both people with high and low NFC are able to process extensively, but they differ in their intrinsic motivation to do so (Liu & Eveland, 2005; Petty et al., 2009). People with high NFC on average produce more cognitive responses (Cacioppo et al., 1986, 1996); feel less stressed when elaborating (Cacioppo et al., 1996); enjoy complex and ambitious tasks, though they prefer tasks that are simultaneously high in coherence and structure (i.e., comprehensibility; Cacioppo & Petty, 1982) to ensure an unrestricted flow of processing (Cacioppo et al., 1983); and they are more aware and reflective of their thoughts (Cacioppo et al., 1996; Petty et al., 2009). All these correlates of high NFC suggest that these people may benefit more from improved comprehensibility and that they are simultaneously more likely to perceive comprehensibility as a relief of processing. In consequence, this should have an effect on their metacognitive evaluation in general and on their perceived competence in particular. We propose the following two hypotheses (see Figure 2):

**H3:** The positive effect of the comprehensibility of a news item on recipients’ perceived knowledge is more pronounced for recipients with a comparably high NFC (compared with recipients with an average NFC).

**H4:** The positive indirect effect of the comprehensibility of a news item on recipients’ perceived capability for political judgment (mediated through their perceived knowledge) is more pronounced for recipients with a comparably high NFC (compared with recipients with an average NFC).
Contrarily, one may argue that people with low NFC benefit less from the relieved processing through improved comprehensibility, because they do not elaborate as intensely as people with high NFC do. On the one hand, it is conceivable that the varying levels of comprehensibility of a news item do not affect the perceived political competencies of people with low NFC. On the other hand, however, people with low NFC may still evaluate messages with varying levels of comprehensibility differently. Following Cacioppo and colleagues (1986), people who are not motivated to elaborate on a message intensively can derive such evaluations heuristically from superficially accessible message characteristics. For example, people with low NFC tend to rely on peripheral cues such as the mere number—instead of the content—of arguments to judge the quality of a text. Similarly, Cho and Schwarz (2006) found that people with low NFC who were presented a difficult-to-read product review judged the product as more innovative and as more complex. The researchers argue that those with low NFC make use of the heuristic assumption that "new information is more difficult to process than familiar information" (p. 319) and adjust their assessment of the product accordingly. Consequently, it is conceivable that the mere fact that they have read a seemingly complex article (shown by, e.g., the use of technical terms and abbreviations as salient heuristic cues) may lead recipients with low NFC to judge the stimulus article as rich in information and therefore themselves as better informed (since they have read it, although not deeply elaborating on it). Briefly put, it is conceivable that comprehensibility does not matter at all for people with below-average NFC; yet it is also conceivable that people of below-average NFC use indicators of low textual comprehensibility as heuristic cues for evaluating their own capabilities. Therefore, we pose two research questions:

<table>
<thead>
<tr>
<th>Comprehensibility</th>
<th>Perceived knowledge</th>
<th>Perceived capability to judge policy options</th>
<th>NFC</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1=high)</td>
<td></td>
<td></td>
<td>H3/RQ1</td>
</tr>
</tbody>
</table>

*Figure 2. Theoretical model B.*
RQ1: How does the comprehensibility of a news item affect perceived political knowledge among people with low NFC (compared with those with an average NFC)?

RQ2: How does the comprehensibility of a news item affect perceived capability for political judgment (mediated through perceived knowledge) among people with low NFC (compared with those with an average NFC)?

Method

Research Design and Sample

A two-group online experiment was designed to test our hypotheses and answer our research questions. The comprehensibility of a fictitious newspaper article (high vs. low comprehensibility) served as the independent variable. In January 2013, a link to an online questionnaire containing both the stimulus article and the measures for establishing dependent and intervening variables was distributed among a convenience sample of Germans age 16 and older. They were contacted through online social networking services by undergraduate students attending an introductory course on communication research at a large German university. No compensation was offered for participation. A total of 138 potential participants had to be invited before the target number of 80 subjects was met; the target number was determined due to a desired group size of about 40 subjects per treatment condition. With this sample size, it was possible to detect at least medium effects (r > .30) with adequate statistical power (> .80) using a Type I error level of < .05.1 The final sample contained 82 respondents who were randomly assigned to either the high-comprehensibility version of the stimulus article or its less comprehensible counterpart. Randomization resulted in slightly uneven group sizes (high comprehensibility n = 38; low comprehensibility n = 44). Fifty percent of the sample was female, and the mean age was 25.7 years (SD = 11.0). Four percent of the participants still went to school, 11% had received lower secondary education, and 84% had received upper secondary education. Given that cognitive style and processing (e.g., NFC) still vary among highly educated and cognitively capable people (Petty et al., 2009), this was not deemed detrimental to the purpose of our study. Furthermore, there were no significant differences between the two treatment groups regarding their main demographic characteristics: age, F(1, 80) = 3.10, p = .08; gender, χ²(1) = 0.20 (n = 82), p = .66; education, χ²(3) = 3.09 (n = 82), p = .38.

Procedure and Stimulus Material

The study was introduced to participants as a survey dealing with media coverage on the Eurozone crisis. The participants were instructed to carefully read a newspaper article about an intervention of the European Central Bank in Greece. They were then presented with either the low-comprehensibility or the high-comprehensibility version of the stimulus. Afterward, we measured the

---

1 Following these specifications, a sample size of 82 suffices for detecting effects of r > .304 of group mean differences > 0.61 (estimated standard deviation of 1.0).
dependent and intervening variables before debriefing the participants about the fact that the article (though not the event described therein) was fictitious.

The article was based on an actual piece of news published in a German high-circulation, high-quality newspaper. It covered a controversial intervention of the European Central Bank aiming at stabilizing the Greek national budget, framed within the general discussion of different measures for supporting countries in fiscal turmoil. In the low-comprehensibility version, all involved institutions and financial mechanisms were referred to by their abbreviations and by their technical terms only. For example, from our stimulus material: "The Governing Council of the ECB approved a short-term rescue plan to prevent a national bankruptcy in Greece. The government in Athens will be allowed to refinance some of their obligations by issuing T-bills." In the high-comprehensibility version, all institutions were named by their full designation and technical terms were shortly defined without using the technical term itself. For example, again from our stimulus material: "The Governing Council of the European Central Bank approved a short-term rescue plan to prevent a national bankruptcy in Greece. The government in Athens will be allowed to refinance some of their obligations by issuing short-term government bonds." The wording of the article and the amount of factual information provided were kept as similar as possible across stimulus versions (i.e., participants could not learn the meaning of an abbreviation or a technical term because they were presented with either the abbreviation/the term itself or its definition—but never both). Simultaneously, avoiding technical terms and abbreviations contributes to a simplification of sentence structure, and the use of short definitions enhances the coherence of the text (Kintsch, 1994). Therefore, by manipulating technical terms and abbreviations, it was possible to create two comparable versions of the same article that still differed with respect to substantial textual dimensions of comprehensibility. The stimulus articles were successfully pretested with 33 friends and family members of undergraduates in communication studies (identical with those who were in charge of the recruitment) with respect to the varying levels comprehensibility.

Measures

It was our aim to test whether the comprehensibility of news items impacts people’s perceived knowledge and their perceived capability for political judgment with respect to the issue that these news items actually deal with. Thus, we follow Bandura’s (1982) argument that (political) self-efficacy (as a superordinate concept to perceived knowledge and capability for political judgment) “can vary across activities and situational circumstances” and should not be understood as a “global disposition assayed by an omnibus test” (p. 142). Therefore, it was not possible to fall back on validated scales and measures. Instead, a new set of items had to be developed to establish perceived knowledge and perceived capability for political judgment at an issue-specific level. We therefore conducted three focus group discussions with 11 participants in each group (again, with the aforementioned undergraduate students in communication studies). In all three groups, we tried to identify (1) a set of facts that were important to fully comprehend the issue dealt with in the stimulus articles (e.g., Greece has the highest national debt of all euro countries with respect to its gross domestic product) and (2) a set of questions that recipients should be able to answer if they were to judge policy options tied to this issue (e.g., should other euro countries accept a debt relief for Greece?). These facts and questions were condensed to specific and superordinate knowledge domains (e.g., the fiscal situation of Greece) and policy fields (e.g., the acceptability of different supporting
measures) and were translated into items representing perceived knowledge within these knowledge domains and perceived capability for political judgment with respect to these policy fields.

**Perceived Knowledge.** Perceived knowledge was established on two levels to represent different levels of cognitive processing and mental organization of information. Participants were asked to indicate how much they knew about the consequences of the Eurozone crisis in Greece (knowledge–Greece), the immediate topic of the stimulus article. Answers were given on a 5-point scale ranging from 1 (I know a lot about it) to 5 (I know very little about it) on four items (e.g., “the fiscal problems of Greece,” $\alpha = .88$). Because the article framed a specific stabilizing intervention in favor of the Greek national budget as part of a broader range of supporting measures discussed in the course of the Eurozone crisis, participants were likewise asked to evaluate their knowledge about the crisis in general (knowledge–crisis in general) regarding three aspects (e.g., “the possibilities of the European Union to counteract the crisis,” $\alpha = .86$). Means and standard deviations for all items and the resulting scales are reported in Table 1.

**Perceived Capability for Political Judgment.** Participants’ perceived capability for political judgment was measured on the same two levels. With respect to the consequences of the Eurozone crisis in Greece (political judgment–Greece), participants were asked to indicate their agreement with four statements (e.g., “I can judge if Greece should receive further financial assistance,” $\alpha = .85$) on a 5-point scale ranging from 1 (I fully agree) to 5 (I don’t agree at all). Perceived capability for political judgment with respect to the Eurozone crisis in general (political judgment–crisis in general) was assessed by two statements (e.g., “I can judge how the European Union should react to the crisis,” $\alpha = .89$).

**Need for Cognition.** Participants’ NFC was measured using the three items with the highest factor loadings from the German version of the NFC inventory (Bless, Wänke, Bohner, Fellhauer, & Schwarz, 1994). Selecting a subset of items from the full NFC inventory is a strategy frequently and successfully applied by communications scholars (e.g., Liu & Eveland, 2005; Matthes, 2006). The selected items were “I prefer my life to be filled with puzzles that I must solve,” $M = 3.1, SD = 0.9$; “I would rather do something that requires little thought than something that is sure to challenge my thinking abilities” (inverse), $M = 2.2, SD = 1.0$; and “I find little satisfaction in deliberating hard and for long hours” (inverse), $M = 2.9, SD = 1.0$. Participants could indicate their agreement with each statement on a 5-point scale ranging from 1 (I fully agree) to 5 (I don’t agree at all). The internal consistency of the resulting scale, $M = 2.7, SD = 0.7$, is imperfect, with $\alpha = .63$; however, since Cronbach’s $\alpha$ is sensitive to the number of items (i.e., reliability increases with the number of items; Cronbach, 1951), an alpha value of .60 is commonly reported as acceptable for scales based on fewer than four items (Peterson, 1994; with respect to NFC: e.g., Matthes, 2006).

**Comprehensibility.** Participants evaluated the comprehensibility of the article on a 5-point scale ranging from 1 (incomprehensible) to 5 (comprehensible), $M = 3.4, SD = 1.2$.

**Factual Knowledge.** At the end of the questionnaire, participants were presented with six multiple-choice questions of varying difficulty to address their factual knowledge about the institutions and financial mechanisms that were mentioned in the stimulus article, mean number of correct answers = 4.4, $SD = 1.2$. A rather difficult example dealt with the aforementioned T-bills. The question “What are T-
bills?“ could be answered by choosing from among the following response options: “short-term government bonds,” “government guarantees with a duration of 10 years,” ”long-term assistance loans for countries and companies alike,” or ”I don’t know.” Other questions dealt with the meanings of the abbreviations EU (European Union) or ECB (European Central Bank).

Demographics. Age, gender, and education were established at the beginning of the questionnaire and before introducing the stimulus article.

Data Analysis

All hypotheses were tested through mediation and moderation analysis (ordinary least squares estimation) using the PROCESS procedure for SPSS (Hayes, 2013). The independent variable was therefore coded as 0 (low comprehensibility) versus 1 (high comprehensibility). The significance of indirect effects was established by obtaining bias-corrected confidence intervals through bootstrapping (10,000 samples).

<table>
<thead>
<tr>
<th>Table 1. Perceived Knowledge and Perceived Capability for Political Judgment.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M</strong></td>
</tr>
<tr>
<td>Perceived knowledge (How much do you know about . . .)</td>
</tr>
<tr>
<td>Greece</td>
</tr>
<tr>
<td>The fiscal problems of Greece?</td>
</tr>
<tr>
<td>The different options for supporting Greece?</td>
</tr>
<tr>
<td>The potential gains and risks of supporting Greece?</td>
</tr>
<tr>
<td>The extent of already initiated support measures for Greece?</td>
</tr>
<tr>
<td>Crisis in general</td>
</tr>
<tr>
<td>The possibilities of the European Union to counteract the crisis?</td>
</tr>
<tr>
<td>The Eurozone crisis in general?</td>
</tr>
<tr>
<td>The possibilities of Germany to contribute to fighting the crisis?</td>
</tr>
<tr>
<td>Perceived capability for political judgment</td>
</tr>
<tr>
<td>Greece</td>
</tr>
<tr>
<td>I can judge if Greece should receive further financial assistance.</td>
</tr>
<tr>
<td>I can well form an opinion about the problem dealt with in the article.</td>
</tr>
<tr>
<td>I can defend an opinion on whether the EU spends too much money on Greece.</td>
</tr>
<tr>
<td>I can judge if the central banks should be allowed to support the national finances of Greece.</td>
</tr>
<tr>
<td>Crisis in general</td>
</tr>
<tr>
<td>I can judge how the European Union should react to the crisis.</td>
</tr>
<tr>
<td>I can judge how German politicians should react to the crisis.</td>
</tr>
</tbody>
</table>
Results

Treatment Check and Acquisition of Factual Knowledge

As a precondition for testing our hypotheses, we established that the comprehensibility of the stimulus article was successfully manipulated without actually transferring more or less information in either of the two versions of the news article. As was intended, participants evaluated the low-comprehensibility version of the stimulus as significantly less comprehensible, \( M = 3.1, SD = 1.2 \), than the high-comprehensibility version, \( M = 3.8, SD = 1.1, F(1, 79) = 7.81, p < .01 \). None of the six questions assessing respondents’ factual knowledge significantly differed in the percentage of accurate answers, and the comprehensibility of the stimulus article did not influence the overall number of correct answers.

Effect of Stimulus Comprehensibility on Participants’ Perceived Knowledge

To test H1 and H2, we calculated a mediation model in which the comprehensibility of the stimulus article was entered as a predictor for participants’ perceived knowledge. Additionally, both perceived knowledge and stimulus comprehensibility served as predictors for participants’ perceived capability to judge policy options (see Figure 3), which made it possible to estimate the direct effect of stimulus comprehensibility on perceived knowledge and its indirect effect on perceived capability to judge policy options (through perceived knowledge as a mediator). We assumed that a comprehensible version of a news item strengthens people’s perceived knowledge even though it may not actually be better at providing them with (new) information (H1). Contrary to our expectations, participants who read the high-comprehensibility version of the stimulus article did not indicate a higher perceived knowledge than participants who were confronted with the low-comprehensibility version of the article. This was true for their perceived knowledge about the consequences of the Eurozone crisis in Greece and in general (knowledge–Greece: \( b = 0.10, t = 0.43, p = .67 \); knowledge–crisis in general: \( b = 0.04, t = 0.17, p = .87 \)). H1 had to be rejected.

Mediated Effect of Comprehensibility on Perceived Capability for Political Judgment

Since the comprehensibility of the stimulus did not affect participants’ perceived knowledge, perceived knowledge also should not mediate the indirect effects on participants’ perceived capability for political judgment. Perceived knowledge consistently predicted perceived capability for political judgment—Greece: \( b = 0.51, t = 5.70, p < .01 \); crisis in general: \( b = 0.66, t = 7.90, p < .01 \)—yet all mediated effects failed to reach significance—judgment–Greece: \( b = 0.05, 95\% \) CI \([-0.16, 0.31] \); judgment–crisis in general: \( b = 0.02, 95\% \) CI \([-0.25, 0.31] \). H2 had to be rejected.
Figure 3. Direct and indirect effects. Model Greece: constant term knowledge = 2.79, \( t = 4.96, p < .01 \); constant term capability = 1.97, \( t = 3.95, p < .01 \). Model Crisis in general: constant term knowledge = 3.04, \( t = 5.68, p < .01 \); constant term capability = 1.38, \( t = 2.92, p < .01 \). Dotted line: path was estimated to have a full analytical model. *\( p < .05 \). **\( p < .01 \). ***\( p < .001 \).
**NFC as a Moderator for the Effect of Comprehensibility on Perceived Knowledge**

For testing H3 and H4, we calculated a moderated mediation model that matched the mediation model used for testing H1 and H2, except that NFC was added as a moderator for both the direct and indirect effects of stimulus comprehensibility on participants’ perceived knowledge and capability to judge policy options (see Figure 4). In H3, we assumed the positive effect of the comprehensibility of a news item on perceived knowledge to be more pronounced for people with a high NFC (compared with those with an average NFC). Though stimulus comprehensibility had no main effect on perceived knowledge, the interaction of stimulus comprehensibility and NFC was significant: This applied to the participants’ perceived knowledge about the consequences of the Eurozone crisis in Greece—interaction term: \( b = 0.78, t = 2.30, p = .02 \), with the entire moderation model explaining 7% of the variance—and about the crisis in general—interaction term: \( b = 0.90, t = 3.23, p < .01 \), with the entire moderation model explaining 12% of the variance. For interpreting the moderation effects, we illustrate the change in the dependent variable (perceived knowledge) for different levels of the moderator (NFC) separately for the two stimulus versions (low comprehensibility vs. high comprehensibility) in Figure 5. In accordance with what we expected, participants with a relatively high NFC (mean plus one standard deviation: \( M + 1 \) SD) felt considerably more knowledgeable when they were presented with the more comprehensible version of the stimulus article. However, for participants with a relatively low NFC (\( M - 1 \) SD) this effect was not only mitigated—it was entirely reversed. Those who read the less comprehensible version of the stimulus article felt considerably more knowledgeable than those who were presented the more comprehensible version. The two opposing effects are so pronounced that among participants who read the high-comprehensibility version, those with high NFC indicated a higher perceived knowledge than those with low NFC—as expected. But among participants who were confronted with the low-comprehensibility version of the stimulus, those with low NFC reported a higher perceived knowledge than participants with high NFC. Therefore, H3 is supported, since participants with high NFC showed the predicted effect of stimulus comprehensibility on perceived knowledge. For participants with low NFC, the effect was reversed (RQ1).
Figure 4. Moderated effects. *95% CI does not include 0. Model Greece: constant term knowledge = 7.78, t = 3.31, p < .01; direct effect of NFC on knowledge = −1.82, t = −2.18, p = .03; constant term capability = 1.73, t = 0.89, p = .37; direct effect of NFC on capability = 0.10, t = 0.16, p = .88. Model crisis in general: constant term knowledge = 9.23, t = 4.76, p < .01; direct effect of NFC on knowledge = −2.25, t = −3.26, p < .01; constant term capability = 2.80, t = 1.59, p = .12; direct effect of NFC on capability = −0.46, t = −0.79, p = .43. Dotted line: path was estimated to have a full analytical model. *p < .05. **p < .01. ***p < .001.
Figure 5. Moderated effect of stimulus comprehensibility on perceived knowledge.
Figure 6. Moderated indirect effect of stimulus comprehensibility on perceived capability for political judgment.
NFC as a Moderator for the Indirect Effect of Stimulus Comprehensibility on Perceived Capability for Political Judgment

In H4, we assumed the mediated effect of stimulus comprehensibility on people’s perceived capability for political judgment (mediated through their perceived knowledge) to be moderated by their NFC. Therefore, for participants with relatively high NFC, comprehensibility should indirectly foster their perceived capability for political judgment. Again, the indirect effect of the interaction (the moderation of the mediated effect) was consistently significant—judgment–Greece: \( b = 0.41 \), 95% CI [0.10, 0.84]; judgment–crisis in general: \( b = 0.56 \), 95% CI [0.17, 1.06]. The resulting moderated mediations explained more than a third of the variance in the dependent variables—judgment–Greece: \( R^2 = .34 \); judgment–crisis in general: \( R^2 = .44 \). To interpret the interaction, we illustrate the change in the indirect effect of stimulus comprehensibility on subjective capability for political judgment as a function of different levels of NFC in Figure 6. For participants with relatively high NFC \((M + 1 \text{ SD})\), the comprehensibility of the stimulus had a positive indirect effect on their perceived capability for political judgment, whereas this was reversed for participants with relatively low NFC \((M - 1 \text{ SD})\). Comprehensibility thus weakened the subjective perception of being capable of judging policy options tied to the Eurozone crisis for participants with low NFC. H4 is supported because high NFC resulted in a significantly higher indirect effect of stimulus comprehensibility on participants’ subjective capability for political judgment. With respect to research question 2, our results indicated that low comprehensibility strengthened the feeling of being capable of judging policy options in the context of the Eurozone crisis (mediated via perceived knowledge) for participants with low NFC.

Discussion

Our results do not indicate a direct effect of media presentation characteristics on participants’ perceived political competence; however, we did find that the need for cognition moderates the influence of the comprehensibility of news items on participants’ perceived political knowledge and on their perceived capability to judge policy options. A more comprehensible version of a news article led to more perceived political competence among people with high NFC. Those with relatively low NFC felt more knowledgeable and more capable of forming an opinion when they were confronted with a less comprehensible news item; this suggests that recipients with a low NFC build their perception of knowledge acquisition and capability to judge different policy options on peripheral cues conveyed by the stimulus article (existence of technical terms and abbreviations), as suggested by Cho and Schwarz (2006). In conclusion, neither the comprehensibility of a news item nor a person’s NFC alone influenced her or his perceived political competence, but the interaction of both had considerable, yet contrasting, effects on citizens’ perceived political knowledge and perceived capability to judge policy options. This, in turn, explains why our main hypotheses were not confirmed. The strong opposing effects of comprehensibility for people with high versus low NFC suppressed the expected main effect.

Additionally, these opposing moderating effects of low versus high NFC on the influence of the comprehensibility of a news item on participants’ perceived knowledge and perceived capability for political judgment may have implications for the occurrence of illusions of knowledge (discrepancies between factual and perceived competence regarding political decisions). Factual political learning requires
deep elaboration on political issues in such a way that citizens should be able to connect new information with what they already know (Eveland, 2001). A higher comprehensibility of the information conveyed makes such elaborate processing easier (Kintsch, 1994). Citizens with high NFC are intrinsically motivated to process information deeply and are thought to profit from enhanced comprehensibility because it fosters the ease of flow-like processing (Petty et al., 2009). These aspects set a fertile soil for acquiring factual political knowledge (Eveland, 2001) and, as our results suggest, a higher level of perceived competence. In consequence, an illusion of knowledge—and possibly all its negative consequences for informed participation and further information seeking—should be less likely to occur among citizens with high NFC. In contrast, those with low NFC need extrinsic motivation to elaborate deeply (Petty et al., 2009); therefore, they are not likely to profit from the higher comprehensibility of news items if no additional external motivation fosters elaboration. Incomprehensible media content, however, imposes negative consequences for citizens with low NFC in two different ways: Given enough external motivation to elaborate, an incomprehensible media article would hamper flow-like processing and, hence, inhibit learning. In cases of a lack of external motivation, incomprehensible media content would not affect citizens' information processing (since those with low NFC would supposedly elaborate on a superficial level only), but—following our results—it would make them believe that they gained competence.

In sum, incomprehensible news content is likely to foster illusions of knowledge among citizens with low NFC, since it either hinders learning or induces a perception of being knowledgeable about and able to judge political options. Getting people with low NFC sufficiently involved in political matters requires moving beyond standard news production. This could be done by combining high levels of comprehensibility with motivating content characteristics. Merging political information with entertainment may be such an approach since entertaining media content is appealing to people with low NFC because, for example, they more often use media for escapist purposes (Henning & Vorderer, 2001). Another possibility would be to present political news in a more narrative manner, given that people with low NFC tend to derive meaning from media content more strongly through means of narrative transportation than people with high NFC—as long as the narration is presented as a video (Green et al., 2008). Following this line of argument, infotainment and storytelling in television news shows appear to be appropriate ways of approaching citizens with low NFC.

These results and interpretations have to be understood in light of several methodological limitations. First of all, the sample of our online experiment was small and severely distorted with regard to the educational level of the participants. Moreover, our participants had to read the news item we prepared for them, and they were only presented one news item dealing with one specific issue. Given that people with high and low NFC differ in how they process (political) information, yet not (substantially) in their tendency to seek out political news, the experimental situation should, however, still be sufficiently realistic for participants regardless of their NFC (e.g., Gangadharatla et al., 2014; Tsfati & Cappella, 2005). Finally, because we aimed to determine the effects of the comprehensibility of political news on recipients' issue-specific perceived knowledge and capability for political judgment, our measures are likewise specific to this one issue. Considering these limitations, our research calls for replication with (1) subjects from different sociodemographic backgrounds, (2) different kinds of news items dealing with different issues, and, accordingly, (3) measures designed to establish perceived political competence with respect to diverse issues. Nonetheless, our results show how important it is to focus on the information
processes behind mere media exposure to explain the impact of media content properties on the volatile and subjective feeling of being politically competent. With perceived competence being a strong predictor of citizens’ political participation (Bennett, 1997; Caprara et al., 2009; Gastil & Xenos, 2010; Kaid et al., 2007; Pollock, 1983), our results provide another piece of the puzzle in understanding the connection between news content characteristics and citizens’ participatory behavior.

References


