

Image Versus Text: How Newspaper Reports Affect Evaluations of Political Candidates

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News coverage has become more visual and research suggests that news images affect assessments of political candidates. This study experimentally investigates the effects of textual versus visual on assessments of politicians' competency and integrity, differentially for males and females. The results show that differences in visual favorability, combined with positive or negative verbal information, shape how people perceive male and female political candidates. The findings suggest that images do matter, but not more so than text, and their impact varies depending on the type of assessment and candidate gender. The results are discussed in light of the image superiority effect and its applicability to candidate communication.

Keywords: candidate traits, experiment gender, image effects, visual versus text

Technological advances in digital photography and online publishing, together with aesthetic demands by editors and publics alike, caused an unprecedented move toward visualization in the media over the past two decades (Coleman, 2006; Fahmy, Bock, & Wanta, 2014; Holly, 2008). Political journalism has adopted this trend (Kenney & Scott, 2003; Lundell, 2010; Mitchell, 2005; Nagel, Maurer, & Reinemann, 2012; Schill, 2012), while also using a more personalized style, increasingly focusing on candidates and their traits rather than parties and policies (e.g., Barnhurst & Steele, 1997; Bucy & Grabe, 2007). This allegedly led to a depoliticization of political media discourses (Druckman, 2003; Van Zoonen, 2005). The ever-increasing omnipresence of images—the “visual,” “pictorial,” or “iconic” turn (Mitchell, 1994; Moxey, 2008)—is only slowly being adopted in political communication research, which by and large appears to be more focused on the production and influences of text only (Barnhurst, Vari, & Rodriguez, 2004; Schill, 2012; but see Coleman & Wu, 2015; Grabe & Bucy, 2009; or examples given in Fahmy et al., 2014). This is in contrast with claims that visual information is at least as powerful as text (e.g., Graber, 1990; Paivio & Csapo, 1973). Research from different areas of communication studies provides

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evidence for the superiority of visuals (Barrett & Barrington, 2005a; Coleman, 2006; Graber, 1990; Wanta, 1988; Zillmann, Knobloch, & Yu, 2001).

News coverage, including both textual and visual information, is a crucial determinant of political candidates' electoral success (e.g., Bartels, 1993; Rosenberg, Bohan, McCafferty, & Harris, 1986), and some studies have specifically addressed visual communication effects on candidate assessments (Coleman & Banning, 2006; Coleman & Wu, 2015; Grabe & Bucy, 2009; Wicks, 2007) or vote decisions (Banducci, Karp, Thrasher, & Rallings, 2008; Todorov et al., 2005). Less is known, however, about how visuals and text vis-à-vis each other, and in particular in combination, affect different dimensions of candidate assessments (but see Nagel et al., 2012; Rosenberg, Kahn, & Tran, 1991). While much theory has been developed concerning text-image relations (e.g., Barthes, 1961; Martinec & Salway, 2005), they have predominantly been assessed in content-analytic studies in political communication (e.g., Knox, 2007; but see Griffin, 2004; Grimes, 1991). The present study aims at understanding the effects of visual versus textual information about political candidates and their interplay on candidate assessments. Do images affect candidate trait evaluations, in addition to, or even more so than text? Does congruence between image and text amplify effects on candidate assessments, and does gender play a role?

The contribution to the literature is threefold: First, image and text effects are studied in combination rather than in isolation, thereby increasing external validity, since in our current media environment it is the norm that both occur together (e.g., Coleman & Wu, 2015; Powell, Boomgaarden, de Swert, & de Vreese, 2015). Second, differential effects on different dimensions of candidate assessments are considered. Third, gender is included as a potentially confounding factor in the relationship between candidate news coverage in text and image and candidate assessments. The results of this study are important beyond their academic relevance. Political campaigners should be interested in understanding how features of campaign materials may have differential effects on public perceptions. Furthermore, journalists need to be aware of the possible consequences of the choice of candidate photos to illustrate political news articles. And finally, information about effects of text versus visuals could be of relevance to voters. An awareness of subtle ways in which images may influence our perceptions of political candidates can lead to media competence and potentially result in a reaction to such influences.

Dimensions of Candidate Assessments

Political candidates are crucial players on the supply side of electoral politics, along with political parties (Karvonen, 2010). With an increasing personalization of politics, in particular during election campaigns (Adam & Maier, 2010; Boumans, Boomgaarden, & Vliegenthart, 2013; Reinemann & Wilke, 2007), and a growing disconnect between voters and parties (e.g., Dalton, 2013; Dassoneville, 2013; Denver & Garnett, 2014), the influence of political candidates on vote decisions has been described as substantial (Barrett & Barrington 2005a; Lobo & Curtice, 2014; Rosenberg & McCafferty, 1987; Rosenberg et al., 1986; Pierce, 1993). Moreover, a range of studies emphasizes that perceptions of candidates' personalities have a key influence in elections (e.g., Caprara, Schwartz, Capanna, Vecchione, & Barbaranelli, 2006; Caprara & Zimbardo, 2004; Catellani & Alberici, 2012; Coleman & Wu, 2015; Costa & Ferreira da Silva, 2015). We take the centrality of political candidates in the electoral process and in related media coverage as a starting point for our analysis of text versus image effects.

Candidate images are made up of different dimensions. Two of the most pertinent ones are assessments of politicians' competence and of their integrity (Barrett & Barrington, 2005a; Bishin, Stevens, & Wilson, 2006; Goren, 2007; Rosenberg & McCafferty, 1987; Rosenberg et al., 1986). The former dimension describes judgments that relate to candidates' determination, professional experience, responsibility, and efficiency in performing professional duties, while the latter includes politicians' honesty, sincerity, and morality. It is argued that competency assessments are more likely to be based on factual information regarding politicians' past performances, and are thus a more rational type of judgment based on a more rational processing of information. Integrity, however, is a more affective type of candidate assessment in which information arguably is processed more heuristically. Consequently, next we infer different types of effects of verbal and visual news coverage on these two dimensions of candidate assessments.

Effects of Image and Text on Candidate Assessments

News media's coverage of political candidates, which varies in the degree to which it is an evaluative tendency, affects voters' candidate evaluations—such as viability, competence, trustworthiness—and, consequently, shapes citizens' voting decisions (Chiang & Knight, 2011; Dalton, Beck, & Huckfeldt, 1998; Kahn & Kenney, 2002; Stevens & Karp, 2012). Druckman and Parkin (2005) argued that inferences about candidate traits are, rather automatically, made from positive or negative descriptions in texts. The salience of favorable and unfavorable candidate descriptions leads to a higher accessibility of these inferences when people form a judgment. This argument is in line with the notion of valence framing effects (de Vreese & Boomgaarden, 2003; Schuck & de Vreese, 2006). Highlighting certain aspects in a news story—in this case, favorable versus unfavorable information about a political candidate—makes them become more salient for recipients when they are asked to evaluate the object—in this case, the candidate (for the general framing effect see, e.g., Chong & Druckman, 2007, or Nelson, Oxley, & Clawson, 1997). The more favorable the description of a candidate a citizen is exposed to, the more positive the citizen's assessments should be. Our interest here is to replicate these findings, and more important, relate them to the effect of candidate images.

Verbal information is processed systematically and sequentially, in a linear fashion, while visual information is processed holistically and rapidly, in a parallel processing system (e.g., Berry, 2005; Elkins, 2003; Schneider & Maasen, 1998). Verbal information is more difficult to remember than images (Coleman, 2006; Messaris, 1997; Nagel et al., 2012), and media consumers allegedly shape their candidate assessments based more on what they see than on what they read and hear (Grabe & Bucy, 2009). A number of scholars argue that structural visual characteristics such as camera angles, size, camera distance, and eye gaze produce effects on viewers' responses (e.g., Coleman, 2010; Graber, 1990; Kepplinger, 1982; Kepplinger & Donsbach, 1990; Messaris, 1997; Wanta, 1988). In this study, we take a more holistic approach to the influence of visuals by considering the overall favorability of politicians' images, mirroring studies looking at text effects, which usually also consider the overall tone, favorability, or framing of a text.

The favorability of candidates' photographs has the ability to affect voters' perceptions of politicians or voting decisions (e.g., Atkinson, Enos, & Hill, 2009; Barrett & Barrington, 2005a; Olivola &

Todorov, 2010; Rosenberg & McCafferty, 1987; Rosenberg et al., 1986; Todorov et al., 2005; see also Fahmy et al., 2014). This study is not interested in between-candidate differences, but rather in favorable versus unfavorable visualizations of the same candidate. After all, news media have a lot of leeway in terms of how to portray politicians (Barrett & Barrington, 2005b). A favorable photograph generally shows a candidate “smiling or looking confident, sometimes against a theatrical background” (Dan & Iorgoveanu, 2013, p. 7). On the other hand, an unfavorable shot may illustrate candidates “with a bewildered or angry look in their face, caught in an awkward physical position or frowning” (p. 7; see also Coleman & Wu, 2015, p. 196).

Images have been recognized as specific types of framing devices (e.g., Tankard, 2001; Van Gorp, 2007). Geise and Baden (2014) made a compelling case for treating visual framing effects as a facet of the general framing process. When we integrate this view with the notion of valence framing, we can expect a favorable image of a candidate to increase the salience of favorable information about that candidate in a recipient’s mind, which in turn should positively affect the candidate’s assessment. This is quite in line with the notion of appearance-based trait inferences (Olivola & Todorov, 2010), which argues that voters very rapidly draw inferences from the appearance of political figures, which subsequently affects their judgments (e.g., Todorov et al., 2005). Responses are caused by subtle cues related to emotional states and are then generalized to inferences about personality characteristics of the person shown in the picture. For instance, people with a happy face are perceived as more trustworthy than people with an angry face (e.g., Montepare & Dobish, 2003; Said, Sebe, & Todorov, 2009). We are borrowing from this literature, and in combination with expectations from visual valence framing, we would expect that:

H1a: Exposure to a favorable image leads to a significantly more positive assessment of a candidate’s competency compared to exposure to an unfavorable image.

H1b: Exposure to a favorable image leads to a significantly more positive assessment of a candidate’s integrity compared to exposure to an unfavorable image.

In addition, we believe it is important to closely scrutinize our outcome variables in terms of their potential to be affected by information in visuals or text. According to dual processing theory, images and language are processed through different routes of the cerebral cortex (Paivio, 1990, 2007). Textual messages are processed serially, one verbal unit at a time, while visual information is processed immediately and holistically, through the same route that emotions travel. Visuals thus tend to generate immediate emotional responses (Barry, 1997). Related yet different routes of influence are described in the heuristic systematic model (Chaiken, 1980). While in the systematic mode, messages are processed analytically, with a fair amount of energy and attention devoted to the contents of a message, in heuristic processing, only simple cues are used as shortcuts for information processing. Notably, the heuristic systematic model does not make a distinction between modes of information, in that verbal or visual messages can be processed through both modes (see also Coleman & Wu, 2015). We here argue that candidate visuals in news reports are likely to be perceived of as heuristic cues, while the text of such a report is more likely to be processed systematically. Similarly, Sparks et al. (2009) contended that text frames—as opposed to visuals—would yield effects through a more cognitive and systematic processing.

Images, by contrast, are processed heuristically and are more likely to trigger affective responses (e.g., Iyer & Oldmeadow, 2006). Heuristic cues have been described as relating to trustworthiness or attractiveness (Coleman & Wu, 2015, Todorov et al., 2002). From this we infer that while verbal messages likely relate to cognitive aspects of political judgments, pictures should trigger more emotional aspects of candidate assessments (Lanzetta et al., 1985; see also Fahmy et al., 2014).

Hence, it is likely that the effectiveness of visual versus verbal information differs for different dimensions of candidate assessments. We tentatively argue that evaluations of politicians' competence are more likely to be prone to conscious processing, in which arguments are deliberately weighted to form a judgment, and thus more likely to be based on textual information. By contrast, assessments of politicians' integrity, the more affective dimension, may be more likely triggered by visuals through their emotional effectiveness (see also Said et al., 2009, on image effects on trustworthiness). Consequently, we expect the following:

H2a: The effect of the image on assessments of candidate integrity is significantly stronger than that of the verbal information.

H2b: The effect of the image on assessments of candidate competency is significantly less strong than that of the verbal information.

The Effects of Text–Image Congruence

If we assume that the salience of favorable information in both text and images is at the root of their (framing) effects (e.g., Coleman, 2010; Geise & Baden, 2014; Tankard, 2001), then we must assume that an increased salience of the same type of information through a textual and a visual device (in other words, congruency) will cause a stronger effect than if the information presented is conflicting. In general, it appears that repeated exposure to the same news messages leads to stronger attitudinal effects (e.g., Moons et al., 2009) or consolidates framing effects (Lecheler & de Vreese, 2011). In addition, stronger frames, namely, those containing a higher salience of framing devices, lead to stronger effects (Chong & Druckman, 2007). We therefore argue that a stronger presence of congruent framing devices (in this case, favorable text and a favorable image, or both being unfavorable) within a news story should also lead to stronger effects than incongruence (see also Budesheim & DePaola, 1994; Geise & Baden, 2014).

Research on multimodality supports this expectation. Cue-summation theory argues that information is best remembered when provided through different codes and received through different modes of transmission (Severin, 1967). When information is shown through different modes, especially verbal and visual, memory is enhanced and learning is improved (Paivio, 1990). Congruent messages in TV news were indeed shown to lead to better recall and issue understanding (Drew & Grimes, 1987; Graber, 1990). We thus expect:

H3a: Congruence of favorability or of unfavorability in text and image leads to significantly stronger effects on candidate assessments than any incongruent combination.

There is, however, good reason to expect visual dominance when the information in images and text is incongruent. Visual elements in general dominate perception above textual (or auditory) stimuli (Mehrabian & Ferris, 1967; Van Damme, Crombez, & Spence, 2009) due to faster processing, and dual coding theory supports this prepotency of images (Paivio, 2007). Visual elements are superior to text in memory-based operations after reception (Kress & Van Leeuwen, 2006; Lester, 2010), lead to improved memory (Grimes, 1990), and, therefore, are likely to exert stronger attitudinal effects (e.g., Paivio & Csapo, 1973; Schneider & Maasen, 1998). Pictures add an emotional component to the messages being transmitted and may affect or override the interpretation of verbal messages (Dillard & Wilson, 1993), motivating and guiding rational and conscious behavior (e.g., LeDoux, 1986). In other words, the emotional templates triggered by visual information result in our "attitudes, ideas, and actions being pushed in particular directions" (Barry, 2005, p. 61). This picture superiority effect is indeed one underlying theme of studies on visual communication effects (see also Coleman, 2010; Gibson & Zillman, 2000; Graber, 1990; Messaris, 1997; Zillman et al., 2001; but see Nagel et al., 2012, for an overview). Altogether this leads us to expect that:

H3b: When favorability in text and image is incongruent, the image will yield the significantly stronger effect.

Image Effects for Male Versus Female Candidates

Image and text effects may differ between male and female candidates. Studies suggest that gender stereotypes, as well as gender bias, are (still) present in candidate news coverage (Kahn, 1996; Semetko & Boomgaarden, 2007; Valenzuela & Correa, 2009). Journalists devote more attention to females candidates' personal lives, physical appearances, or personality attributes like sincerity and integrity, compared to male politicians, for whom coverage focuses more on their occupation, experience, competency, and professional accomplishments (Bystrom, 2006; Davis, 1982; Heldman, Carroll, & Olson, 2005; Hooghe, Jacobs, & Claes, 2015; Jamieson, 1995; Kahn & Goldenberg, 1991; Meeks, 2012). Also, it seems that female candidates draw more trait coverage and less issue coverage (Dunaway, Lawrence, Rose, & Weber, 2013). Scholarly attention has also been paid to a gender bias in visual political communication, revealing mixed results (Dan & Iorgoveanu, 2013; Goodnow, 2010; Moriarty & Poppovich, 1989; Waldman & Devitt, 1998). We are interested in how incongruence in the favorability between photo and text may yield different assessments of male and female politicians. One could infer that publics are more familiar with coverage of females emphasizing a rather affective dimension. Therefore, one could tentatively expect differential effects of text versus visuals for males versus females, in particular on assessments of their integrity, the more affective candidate dimension. At this point, however, we do not have sufficient theoretical grounding to pose a concrete hypothesis. We therefore ask:

RQ: Does the incongruence between the favorability of text and image yield different effects for assessments of male versus female candidates, and does this differ between integrity and competency assessments?

Method

Experimental Design and Stimulus Materials

An experiment with a 2 (gender of politician: male versus female) x 2 (text of newspaper article: favorable versus unfavorable) x 2 (photo of politician: favorable versus unfavorable) between-subjects factorial design was conducted in the Netherlands. Participants were randomly assigned to one of the eight conditions and read one newspaper article (for illustration, see Appendix A, which presents four of the eight stimuli). In this way the effects of text, photo, and gender could be assessed separately and also in interaction with one another. Randomization proved to be successful on all available variables, as the eight groups did not differ significantly on age, gender, church attendance, place of residence, frequency of reading newspapers or watching television news, and political knowledge or political ideology. Table 1 provides the number of participants in each condition.

Participants were exposure to one manipulated newspaper article containing a photograph that introduced a fictitious politician who was a candidate in the elections for the European Parliament (EP). The stimuli were similar to a large extent: They had the same title ("*European Parliamentary elections: We introduce you to the candidates*"), and the first two paragraphs were exactly the same. Here, it was reported that turnout rates for the upcoming EP elections were expected to be low, most likely because members of the European Parliament are rather unknown. The fictitious newspaper, therefore, decided to introduce EP candidates.

The first factor in the design was the gender of the political candidate. Participants were exposed to an article that introduced either a male or a female politician. Newspaper articles differed in the name of the candidate (Marcel Verver versus Marije Verver), the use of "he/him" versus "she/her" in the text (in Dutch: hij/zijn versus zij/haar), and the photograph employed.

The second manipulation in the experiment was whether textual coverage within the newspaper article was favorable or unfavorable toward the candidate. This was operationalized by some modifications in the two final paragraphs. First, in the favorable text, the politician was presented as having experience in Parliament and being efficient, reliable, and accurate, whereas in the unfavorable text the candidate was depicted as having no political experience in politics and his or her integrity was put into question. Second, in the favorable text it was reported that the politician's knowledge and commitment were not disputed, not even by political opponents, in contrast to report in the unfavorable text condition. A manipulation check, which was placed at the end of the questionnaire and filled out by all participants, confirmed significant differences between the groups: 97.1% of participants exposed to the favorable text said it was positive, compared to only 47.6% of those exposed to the unfavorable text.

The third factor in the experiment was whether the newspaper photograph was favorable or unfavorable. We used photos of Romanian political candidates, who were very unlikely to be known by the Dutch participants (see Hobolt, 2007, for the general ignorance of EU affairs). In the favorable picture the politician smiled and looked confident, whereas in the unfavorable picture the candidate appeared to be in an uncomfortable situation, frowning and looking worried. The manipulation check conducted on the full

sample at the very end of the questionnaire confirmed a difference in perception of the two photos: 78.6% of participants exposed to the favorable photo thought the politician was portrayed in a positive way, compared to only 21.4% of those who saw the unfavorable photo.

Participants

Participants were recruited among communication science students of a large Dutch university, mainly first (42.4%) and second year students (36.6%). In exchange for participation, they could earn research credits. In total, 296 participants completed the experiment. Their age ranged from 17 to 27 ($M = 19.9$, $SD = 1.67$), and 78.6% was female.

Measures

After participants were exposed to the newspaper article, they responded to eight items on 7-point Likert-type scales to assess the politician they had just read about. These items asked about politicians' (a) competence, (b) experience, (c) corruptness, (d) determination, (e) fairness, (f) sense of responsibility, (g) honesty, and (h) friendliness (see Appendix B for item wordings). A factor analysis yielded two latent components with Eigenvalues above 1. The first factor represents participants' assessment of the politician's competence (competent, experienced, determined, and responsible). The second component measures perceived candidate integrity (fairness, honesty, friendliness, and corruptness). Reliable scales measuring perceptions of competence (Cronbach's $\alpha = .79$, $M = 4.62$, $SD = 1.21$) and integrity (Cronbach's $\alpha = .76$, $M = 4.58$, $SD = .73$) were created by averaging the items.

Analysis

To analyze the differences in participants' candidate assessments across the eight conditions, a multivariate analysis of variance (MANOVA) was used, with (a) text (un)favorability, (b) image (un)favorability, and (c) gender as (independent) fixed factors to test all the hypotheses at once.¹ Full factorial models were used, which means that two-way and three-way interactions between the fixed factors were tested and controlled for.

Findings

Our empirical results are organized by outcome variables, and we first discuss the more rational type of assessment, candidate's competence, before we present the results regarding integrity. The omnibus test results based on Wilks's lambda (λ) showed that overall the manipulated text, $\lambda = 0.387$, $F(2, 273) = 215.90$, $p < .001$, and the manipulated photo, $\lambda = 0.955$, $F(2, 273) = 6.50$, $p = .002$, led to significant differences. Overall, the gender of the political candidate did not significantly matter, $\lambda =$

¹ One participant was not included in the analyses because it took her 4 hours to complete the experiment, four participants were excluded because they wrongly answered the candidate gender question, and one participant was excluded because of too high a Cook's D value. Including these six people does not substantially alter any of the findings.

0.997, $F(2, 273) = 0.37$. Table 1 shows the average scores for the eight conditions on the two dependent variables of interest: competence and integrity.

Effects on Competence Assessments

Only one of the manipulated aspects in the newspaper article significantly affected the competence assessment. Participants who read a favorable text ($M = 5.54$, $SE = 0.07$) had a higher score on the assessment of politician's competence, $F(1, 274) = 398.24$, $p < .001$, $\eta^2 = .59$, than individuals exposed to the unfavorable text ($M = 3.70$, $SE = 0.06$). Text favorability thus strongly affected the more rational aspect of candidate assessments, a finding that replicates earlier, text-based studies. Neither the favorability of the photograph, $F(1, 274) = 0.20$, $p = .655$, $\eta^2 = .00$, nor the candidate's gender, $F(1, 274) = 0.39$, $p = .53$, $\eta^2 = .00$, had any main effect on competence perceptions. While the former does not support H1a, it also is a first indication in support of H2b: Assessments of candidate competence are more strongly affected by textual than visual information.

Table 1. The Number of Participants and Averages of Competence and Integrity per Condition.

Conditions	<i>n</i>	Competence	Integrity
		<i>M</i> (<i>SE</i>)	<i>M</i> (<i>SE</i>)
Favorable text, favorable photo, male politician	36	5.48 (0.13)	4.85 (0.12)
Favorable text, favorable photo, female politician	33	5.64 (0.13)	4.82 (0.12)
Favorable text, unfavorable photo, male politician	34	5.53 (0.13)	4.68 (0.12)
Favorable text, unfavorable photo, female politician	35	5.49 (0.13)	4.51 (0.12)
Unfavorable text, favorable photo, male politician	36	3.91 (0.13)	4.65 (0.12)
Unfavorable text, favorable photo, female politician	37	3.52 (0.13)	4.57 (0.12)
Unfavorable text, unfavorable photo, male politician	36	3.67 (0.13)	4.08 (0.12)
Unfavorable text, unfavorable photo, female politician	35	3.71 (0.13)	4.45 (0.12)

We expected that congruence of (un)favorability in text and image would lead to stronger effects than any of the incongruent combinations. As the interaction effect of image and text turned out to be insignificant, $F(1, 274) = 0.02$, $p = .888$, $\eta^2 = .00$, these hypotheses could not be supported. Nonetheless, the condition with the favorable photo and text resulted in the highest competency rating ($M = 5.56$, $SE = 0.09$). Following Bonferroni post-hoc tests, this was only slightly, but not significantly, higher than the condition in which participants read the article with the favorable text and unfavorable photo ($M = 5.51$, $SE = 0.09$, $p = .681$). However, the rating was significantly higher than for the participants who read the unfavorable text and favorable photo article ($M = 3.72$, $SE = 0.09$, $p < .001$), which has to do with the significant main effect of text favorability reported.

Similarly, participants in the condition with the unfavorable text and unfavorable photo on average rated the politician the lowest on competency ($M = 3.69$, $SE = 0.09$). Ratings were not

significantly lower than in the condition with the favorable photo and unfavorable text ($M = 3.72$, $SE = 0.09$, $p = .827$), but they were lower than in the condition with the unfavorable photo and favorable text ($M = 5.51$, $SE = 0.09$, $p < .001$) according to the Bonferroni post-hoc tests. Thus, a reinforcing congruency effect of text and photo seemed not to have occurred, since the effect of the text was so dominant that the photo did not matter. In case of image–text incongruence, the text determined how participants evaluated the politician. Thus, no support for H3a and H3b was found.

It is interesting that, in relation to our research question, the results of our analysis emphasized that politicians' gender and image favorability influenced the effectiveness of textual coverage. Though the significant three-way interaction effect between these variables was not significant, $F(1, 274) = 3.02$, $p = .084$, $\eta^2 = .00$, Bonferroni post-hoc tests show that the difference in perceived competence between the male and female politicians was insignificant under all conditions except for one ($p = .032$): when the female candidate was verbally depicted in an unfavorable fashion but with a favorable photograph. In this condition, the Bonferroni post-hoc test showed that participants were even more likely to evaluate her negatively ($M = 3.52$, $SE = 0.13$) than when the male politician was textually described unfavorably but with an advantageous image ($M = 3.91$, $SE = 0.13$). The effect of an unfavorable text was thus amplified by a favorable photograph, but only in case of the female candidate. *Apparently, this incongruence—lacking skills but looking attractive—harms assessments of female candidates' competency somewhat more than that of male politicians.*

Effects on Integrity Assessments

Participants' perceptions of politicians' integrity dimension are not only affected by the text they read but also by the photograph. Participants who read the favorable textual coverage also had a significantly higher score on perceptions of candidates' integrity ($M = 4.71$, $SE = 0.06$) than those exposed to the unfavorable text ($M = 4.44$, $SE = 0.06$), $F(1, 274) = 10.58$, $p = .001$, $\eta^2 = .03$. An equally strong effect was found for the photograph that was included within the newspaper article: people who saw the favorable photograph assessed politician's integrity higher ($M = 4.72$, $SE = 0.06$) than those who saw the unfavorable image ($M = 4.43$, $SE = 0.06$), $F(1, 274) = 11.74$, $p = .001$, $\eta^2 = .04$. These findings replicate earlier studies on text effects, and with regard to visuals, they support H1b. No main effect was found regarding politician's gender, $F(1, 274) = 0.07$, $p = .79$, $\eta^2 = .00$, nor was it specifically expected.

The simultaneous presence of a favorable text and photo seemed to have reinforced each other's effect weakly, though the interaction effect of the image with the text was not significant, $F(1, 274) = 0.39$, $p = .532$, $\eta^2 = .00$. The condition in which participants were exposed to the favorable text and favorable photo caused the highest average rating of integrity ($M = 4.83$, $SE = 0.09$), yet the Bonferroni post-hoc test showed this was only marginally significantly higher than for the article with the favorable text and the unfavorable photo ($M = 4.60$, $SE = 0.09$), $p = .051$. The difference for the favorable photo and the unfavorable text ($M = 4.61$, $SE = 0.08$) was not significant, $p = .064$, although it pointed in the same direction.

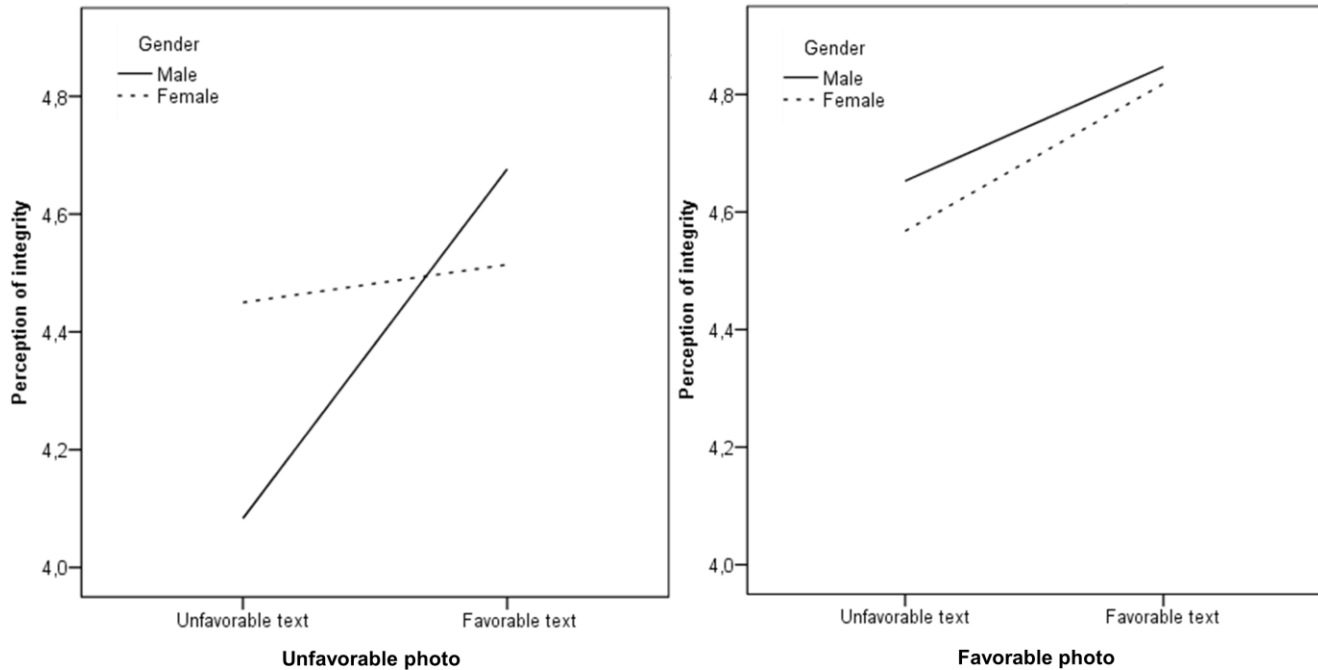


Figure 1. The effect on perceived integrity of text favorability and photo favorability by gender.

Furthermore, the article with the unfavorable text and unfavorable photo evoked the lowest evaluations of the politician's integrity ($M = 4.27$, $SE = 0.08$). Following the Bonferroni post-hoc tests, this was significantly lower than the condition with the unfavorable photo and favorable text ($M = 4.60$, $SE = 0.09$, $p = .007$), and also lower than the condition with the favorable photo and unfavorable text ($M = 4.61$, $SE = 0.08$, $p = .004$). In the case of image–text incongruence, both manipulations seemed to have played an equally powerful role, as the difference in evaluation of the politician's integrity is negligible. This finding only weakly supports our expectations formulated in H3a, and it does not provide any evidence for H3b's expectation of a dominant visual effect.

Responding to our research question, for politicians' integrity dimension we also found a nonsignificant three-way interaction effect between the three manipulated aspects, $F(1, 274) = 2.98$, $p = .086$, $\eta^2 = .01$. Yet the Bonferroni post-hoc tests showed a remarkable difference, which is displayed in Figure 1. The figure shows that perceptions of both male and female candidates' integrity are equal under most conditions. However, an unfavorable text accompanied by an unfavorable photograph led to worse assessments of male politicians' integrity ($M = 4.08$, $SE = 0.12$) compared to that of the female politician ($M = 4.45$, $SE = 0.12$), $p = .031$. *This congruence—lacking skills and looking unattractive—damages evaluations of male candidates' integrity more than that of female politicians.* For the female candidate, Figure 1 shows a rather flat line illustrating the effect of text (un)favorability, whereas for the male politician there clearly is an effect of the text. Thus, the male candidate that was depicted unfavorably

benefited more from a positive text than a female candidate did, as this neutralized the negative effect of the photo. For the female candidate, the visual information seemed to be dominant in the case of an unfavorable photo.

Discussion and Conclusion

This study aimed at furthering our understanding of text versus image effects in newspaper articles on assessments of political candidates and whether this differed for male and female candidates. Overall, however, we only found limited support for our expectations. First, as expected we show that reading a favorable text positively affected assessments of candidate's professional skills, as well as of their personality attributes. Second, we only partially confirmed our expectation that a favorable image would lead to a more positive assessment of candidate competency and integrity. This assumption only holds true in case of assessments of candidates' integrity. This supports our expectation that indeed competence assessments are rather driven by text and not by images. The reverse, however, was not confirmed. It was not the case that the image was more effective than the text when it came to assessments of a candidate's integrity.

We thus see that images are rather irrelevant when it comes to more rational, argument-based candidate assessments. Overall, competence assessments followed the gist of the text, no matter whether the accompanying image was favorable or not. For integrity assessments, however, we do see a significant effect of the image, roughly equaling that of the text. Thus, while our reasoning that image effects should be stronger than text effects for more personality-oriented assessments was not supported here, at least images do play a role for these types of assessments. From a democratic perspective, these results are not entirely detrimental. It is reassuring to see that individuals base their opinions of politicians' competence, experience, and professionalism mainly on what is factually written about them rather than on how they are visually portrayed.

It seems that our results point out that image superiority effects may strongly depend on the types of information provided and the types of assessment asked for. On the one hand, our findings run counter to those claiming the superiority of images (e.g., Arpan et al., 2006; Coleman, 2006; Gibson & Zillmann, 2000; Graber, 1990; Zillmann et al., 2001). On the other hand, they are in line with recent findings that also show no evidence of a clear superiority of pictures during multiple U.S. elections (Coleman & Wu, 2015). In general it would be advisable to further our understanding of which (dimensions of) political judgments are more or less prone to be stimulated by visual rather than verbal information, and possibly also the effects of different types of visual and verbal information. To that end, emotional responses would be good to measure as additional mediating variables (see also Coleman & Wu, 2015).

In a second step, we were interested in the consequences of (in)congruence between text and image. We speculated that congruent messages should yield stronger effects and that in the case of incongruence we would find that images are superior in their effectiveness. Congruent text-image combinations led to the highest ratings of congruence and integrity and incongruent combinations to the lowest ratings, however, congruent conditions were only marginally significantly different from

incongruent conditions for integrity assessments. As we did not establish any overall effect for picture superiority, it was unlikely we would find such an effect for incongruent conditions.

Finally, the inclusion of candidate gender shows some effects that, although they are not very strong, are quite interesting. For female candidates, it seems that looking attractive does not help when the professional skills are being described as lacking. Regarding integrity, we find that for female candidates a positive text is not very helpful once it is accompanied by an unfavorable photo; the visual information was dominant. These effects of candidate gender on the relationships between image and text favorability and candidate trait assessments thus are not very encouraging for female candidates. Future studies should build on these insights and provide more thorough and multiple types of evidence to give more certainty to the initial observations made in our study. An additional route for research on visual versus text effects on candidate perceptions would be to make more explicit links to studies dealing with the authenticity of candidate portrayals and the role of visuals. It was suggested that portrayals of chancellor candidates led to more positive assessments when images were accompanied by sound-bites (Donsbach & Jandura, 2003). It is likely that using the candidates' own words in verbal accounts will relate to visual effects differently than third-party texts but there is very little in terms of empirical testing (see also Grabe & Bucy, 2009).

While we consider this research to be a valuable endeavor adding to the understanding of text versus image effects and their interplay on candidate assessments, there are certainly limitations to our approach. First, we used a convenience sample. In particular the fact that about three quarters of our participants were female may have affected the gender-specific results. Also, our student sample is rather highly educated, making it likely that our participants processed textual information rather effortlessly. Second, we relied on a rather simple manipulation of the visual stimulus, in that we looked at the effects of overall favorable or unfavorable photos. It would be an interesting endeavor to investigate specific image attributes that may drive the effects (see, e.g., Rosenberg et al. 1991). Furthermore we exposed our sample to only one of the manipulated articles, while message repetition could lead to more generalizable understanding of treatment effects (Thorson, Wicks, & Leshner, 2012). We acknowledge that our single-exposure design challenges the strength of our results and future studies are well advised in creating treatment variance. Third, we used a rather traditional newspaper story as stimulus material. There is, however, an ongoing tendency toward a convergence of different journalistic forms and in particular an increasing move toward the use of moving images, in particular in online media (e.g., Quandt & Singer, 2008; Wallace, 2009). Studying text-image relationships and their effects in the context of audiovisual political information would certainly be an asset. Fourth, our study was confined to two, although arguably rather dominant, dimensions of candidate characteristics. Future studies could be more inclusive and test the proposed effects of text versus image on a multidimensional construct of politicians' perceived personality traits.

Notwithstanding these limitations, we believe our study makes an important step into furthering research on images and image-text relationships in the area of political communication. Considering the omnipresence of images in political information, we argue it is high time for political communication research to move away from a focus on text effects.

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Appendix A: Experimental Stimuli

POLITIEK

Europese Parlementsverkiezingen: Wij stellen u voor aan de kandidaten

door Hans Duijn

De Europese Parlementsverkiezingen komen snel naderbij en de Nederlandse kandidaten zijn inmiddels met hun campagnes begonnen. In totaal zal Nederland straks 25 politici afvaardigen naar Brussel.

Ondanks alles is de verwachting dat de verkiezingsopkomst opnieuw laag zal uitvallen. Dit wordt mede veroorzaakt door het feit dat Europarlementariërs weinig bekendheid genieten. Daarom zullen wij in deze dagelijkse rubriek elke dag een kandidaat kort aan u voorstellen.

Volgens de laatste peilingen maakt Marcel Verver goede kans genoeg stemmen te verzamelen om straks in het Europese Parlement zitting te nemen. Met acht jaar ervaring in de Tweede Kamer en vijf jaar in het Europees Parlement heeft hij reeds bewezen de

taken die bij dit ambt horen efficiënt en nauwkeurig te kunnen uitvoeren. Zijn kennis en inzet voor de verdediging van Nederlandse belangen in Europa worden daarom, zelfs door politieke opposenten, niet betwist.



Marcel Verver © ANP

Figure A1. Male, favorable text, favorable photograph.

POLITIEK**Europese Parlementsverkiezingen:
Wij stellen u voor aan de kandidaten**

door Hans Duijn

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Marcel Verver

© ANP

Figure A2. Male, favorable text, unfavorable photograph.

POLITIEK

Europese Parlementsverkiezingen: Wij stellen u voor aan de kandidaten

door Hans Duijn

De Europese Parlementsverkiezingen komen snel naderbij en de Nederlandse kandidaten zijn inmiddels met hun campagnes begonnen. In totaal zal Nederland straks 25 politici afvaardigen naar Brussel.

Ondanks alles is de verwachting dat de verkiezingsopkomst opnieuw laag zal uitvallen. Dit wordt mede veroorzaakt door het feit dat Europarlementariërs weinig bekendheid genieten. Daarom zullen wij in deze dagelijkse rubriek elke dag een kandidaat kort aan u voorstellen.

Volgens de laatste peilingen maakt Marije Verver goede kans genoeg stemmen te verzamelen om straks in het Europese Parlement zitting te nemen. Zonder ervaring in de Tweede Kamer of het Europees Parlement zal deze nieuwkomer in de politiek echter nog

moeten bewijzen de taken die bij dit ambt horen efficiënt en nauwkeurig te kunnen uitvoeren. Voorlopig worden haar kennis en inzet voor de verdediging van Nederlandse belangen in Europa echter nog betwist door politieke opposenten.



Marije Verver

© ANP

Figure A3. Female, unfavorable text, favorable photograph.

POLITIEK

Europese Parlementsverkiezingen: Wij stellen u voor aan de kandidaten

door Hans Duijn

De Europese Parlementsverkiezingen komen snel naderbij en de Nederlandse kandidaten zijn inmiddels met hun campagnes begonnen. In totaal zal Nederland straks 25 politici afvaardigen naar Brussel.

Ondanks alles is de verwachting dat de verkiezingsopkomst opnieuw laag zal uitvallen. Dit wordt mede veroorzaakt door het feit dat Europarlementariërs weinig bekendheid genieten. Daarom zullen wij in deze dagelijkse rubriek elke dag een kandidaat kort aan u voorstellen.

Volgens de laatste peilingen maakt Marije Verver goede kans genoeg stemmen te verzamelen om straks in het Europese Parlement zitting te nemen. Zonder ervaring in de Tweede Kamer of het Europees Parlement zal deze nieuwkomer in de politiek echter nog

moeten bewijzen de taken die bij dit ambt horen efficiënt en nauwkeurig te kunnen uitvoeren. Voorlopig worden haar kennis en inzet voor de verdediging van Nederlandse belangen in Europa echter nog betwist door politieke opposenten.



Marije Verver

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Figure A4. Female, unfavorable text, unfavorable photograph.

Appendix B: Items Measuring Candidate Perceptions

On a scale from 1 to 7, how would you rate the politician in the newspaper article on the following dimensions:

- Incompetent vs. Competent
- Inexperience vs. Experienced
- Hesitating vs. Determined
- Irresponsible vs. Responsible
- Unfair vs. Fair
- Dishonest vs. Honest
- Unpleasant vs. Friendly
- Corrupt vs. Upright