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Consumer responses to promoted tweets sent by brands and political parties

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Abstract

This study aims to understand how consumers respond to social media advertising (SMA) by focusing on promoted tweets sent by brands and political parties, and examines persuasion knowledge as underlying mechanism of these responses. Two online experiments with between-subjects designs, comparing the effects of SMA (promoted vs. non-promoted tweet) and the source of the tweet (political party vs. brand), were conducted. Study 1 showed that consumers rarely notice it when a tweet is promoted. Study 2 demonstrated that when a promoted tweet was sent by a political party, the recipient’s recognition that the tweet was a form of advertisement (i.e., activated persuasion knowledge) reduced online behavioral intention, increased skepticism, and negatively affected source trustworthiness and attitudes. This effect was not present for brands. Although research has shown that social media can be an important platform to engage audiences, this study is the first to study the mechanisms underlying the effects of SMA, and whether there are any boundary conditions to these effects. These findings suggest that political parties should be cautious in their use of social media advertising as it can evoke negative responses.

1. Introduction

Social media are important in our daily lives, and have become an important platform to send across messages to specific audiences, such as consumers and voters. Research has shown that the usage of social media, such as Twitter, can be useful for political parties, organizations, and brands to engage audiences online (Kruikemeier, 2014; Okazaki, Diaz-Martín, Rozano, & Menéndez-Benito, 2015; Park, 2013; Van Norel et al., 2014). Therefore, Twitter has become an important medium for social media advertising (SMA; Van Dijck, 2011). Specifically, Twitter has allowed advertising since 2010, by including sponsored content, such as ‘promoted tweets’. Promoted tweets are tweets purchased by advertisers that are visible to a specific target audience (Twitter, 2014). The deployment of promoted tweets can effectively evoke engagement (i.e., mentions of the brand in the tweet) and tweets with a positive sentiment about the advertiser (Dacres, Haddadi, & Purver, 2014).

However, the introduction of promoted tweets also involves some risks. Consumers may not appreciate this type of advertising (Van Dijck, 2011). Research suggests that the use of promoted tweets could negatively affect consumers’ attitudes towards the brand sending it and lowers consumers’ intention to click on a URL in the tweet (Wood & Burkhalter, 2014). Therefore, it is crucial for both advertisers and Twitter itself to understand whether consumers accept advertising on Twitter (Taylor, Lewin, & Strutton, 2011). Moreover, little is known about the mechanisms underlying the effects of SMA, and whether there are any boundary conditions to these effects. Therefore, this study aims to test these, by gaining insights into how consumers process, recognize, and respond to promoted tweets, and whether this is contingent upon the source of the tweet (i.e., a political party or brand).

As SMA is fairly new, little is known about the extent to which consumers understand this type of advertising, and thus whether or not they have developed persuasion knowledge about SMA. Persuasion knowledge refers to personal knowledge and beliefs about advertising motives and tactics (Friestad & Wright, 1994). The activation of persuasion knowledge in response to advertising is often seen as an important underlying mechanism that may explain different consumer responses (Ham, Nelson, & Das, 2015; Lee & Hansen, 2013). This means that the use of persuasion knowledge in response to promoted tweets may be the underlying mechanism to the persuasive outcomes of promoted tweets (i.e., online behavioral intention) and consumers’ responses towards the
promoted tweet and its sender (i.e., source attitudes, source trustworthiness, and skepticism). Therefore, this study investigates consumers’ use of persuasion knowledge, operationalized as the extent to which consumers recognize promoted tweets as advertising.

A possible boundary condition for the effects of promoted tweets could be the source that is sending out the tweet. Although promoted tweets are usually employed by brands, they are also used in political campaigns. Consumers may respond differently to SMA sent by political parties compared to SMA sent by brands. Recently, researchers have argued that voters and consumers cannot be treated in a similar manner and that marketing strategies for these two audiences should be implemented in different ways (Van Steenburg, 2015). As the decision to support a party is fundamentally different from the decision to buy a product, political advertising might affect voter attitudes differently than product advertising. Such insights might help to understand whether a ‘voter as consumer’ paradigm exists (Van Steenburg, 2015). Thus, tweets from different sources, and about different categories of goods and services, may have diverse effects. This study examines whether or not consumers appreciate the use of SMA in both contexts, and thus whether this is a beneficial strategy for both brands and political parties.

Altogether, by conducting two experiments, we try to provide insights into: (1) consumers’ responses to promoted tweets (vs. non-promoted tweets) and the role of persuasion knowledge (i.e., the recognition of advertising) in the processing of this advertising format, and (2) whether these responses differ between promoted tweets sent by brands and political parties.

2. The use of persuasion knowledge in response to promoted tweets

The Persuasion Knowledge Model (Friestad & Wright, 1994) explains how consumers respond to different advertising messages. The model suggests that the way consumers cope with advertising messages depends on the recognition of the persuasive nature of the message. The development of persuasion knowledge is influenced by how much experience a person has with particular persuasion attempts and continues developing throughout the life span but is presumed to be well-developed in adulthood (Friestad & Wright, 1994; John, 1999).

New advertising formats, such as SMA, challenge consumers’ persuasion knowledge as they may not yet know and understand these formats. Because of the relative newness of SMA, consumers may not have experience with new advertising formats, such as promoted tweets. Consumers with less experience are less likely to have developed persuasion knowledge and to recognize its persuasive purpose. This is underscored by the idea that it is more difficult for consumers to evaluate information on the Internet than information in traditional, mass communications media, because the content on the Internet changes quickly, does not provide clear information about editorial policies, and contains many types of information (Hanagin & Metzger, 2000). The development of persuasion knowledge can therefore be problematic (Tutaj & Van Reijmersdal, 2012).

However, there has been very little research on the use of persuasion knowledge in response to SMA. Therefore, this study tries to establish the extent to which consumers recognize promoted tweets as a form of advertising, and thus activate persuasion knowledge in response to promoted tweets. Although persuasion knowledge is a larger construct that exists of many levels (Friestad & Wright, 1994; John, 1999; Rozendaal, Lapierre, Van Reijmersdal, & Buijzen, 2011), in this study it is operationalized as the recognition of a tweet as advertising. This is based on the notion that the recognition of advertising is seen as a first step that can induce the activation or usage of other dimensions of persuasion knowledge, such as an understanding of the persuasive intent of the message and the development of critical attitudes (Boerman, Van Reijmersdal, & Neijens, 2014; Rozendaal et al., 2011; Wojdynski & Evans, 2016).

Because consumers’ persuasion knowledge about SMA may not be as developed as it is about other types of advertising, promoted tweets are clearly labeled with both an icon (i.e., a colored arrow) and a label that says ‘Promoted by’ followed by the advertisers’ name, to help distinguish them from regular tweets. Prior research has shown that making the persuasive nature of a message more salient helps consumers to activate their persuasion knowledge (Boerman, Van Reijmersdal, & Neijens, 2012; Campbell & Kirmani, 2000; Ham et al., 2015; Wojdynski & Evans, 2016). Moreover, the ‘Promoted by’ label may work as a heuristic cue that can (automatically) activate persuasion knowledge (Fransen & Fennis, 2014).

However, whether people do activate their persuasion knowledge in response to different types of tweets may depend upon the sender of that tweet. Promoted tweets are often deployed by brands, but political organizations also use promoted tweets in their campaigns. In recent years, Twitter has become an integral part of political campaigns (e.g., Lee, 2013; Veckman & Hermans, 2013). Candidates and political parties increasingly use social media, to attempt to engage voters and win votes. They do so during political campaigns, but also in periods that do not involve specific elections: Continuous or permanent campaigning is an important part of the post-modern and professional campaign (Gibson & Römmele, 2001; Strombäck & Kioussis, 2014) and seems to become more dominant in recent years.

Research repeatedly shows that (an interactive) use of Twitter by politicians is beneficial, as it leads to more votes and, in specific cases, positive evaluations (Kruikemeier, 2014; Lee & Shin, 2012; Spierings & Jacobs, 2014). Recently, and in addition to posting regular social media posts, politicians and parties have started using SMA. For instance, during the 2012 US presidential election campaign, both Romney and Obama used promoted tweets in Twitter users’ timelines. These promoted tweets aimed to influence peoples’ attitudes, to inform them, to reach new voters, and to inspire people to share messages (Twitter Business, n.d.). These aims resemble those of brands, which use promoted tweets to create awareness, promote sales, and generate web traffic (Twitter, 2014).

An important question is whether the activation of persuasion knowledge differs in response to SMA disseminated by brands and political parties. There is reason to believe that consumers will be more likely to recognize messages sent by brands as advertising, compared to messages by political parties. This is based on the goals of brands and political parties, and people’s expectations of the messages sent by them.

Brands and political parties have different goals and different reasons for communicating with an audience (Van Steenburg, 2015). Brands aim to promote a certain product or service with the intention of increasing profits, whereas political parties try to promote themselves, publicize agendas, and mobilize citizens to take action with the ultimate aim of winning an election (Peng & Hackley, 2009; Rodgers & Thorson, 2000). Scholars have pointed out that few similarities exist between voters and consumers when considered as target audiences (Lock & Harris, 1996; Peng & Hackley, 2009). Persuading voters on moral issues is different than persuading consumers to buy a product (Lock & Harris, 1996), though political parties often borrow tactics from advertisers. Moreover, the decision to support a party is fundamentally different from the decision to buy a product. Therefore, voters and consumers cannot be treated in a similar manner, and marketing
strategies for these two audiences are often implemented in different ways (Van Steenburg, 2015).

Because brands and political parties have different goals and communication strategies, people also have different expectations of their communication. Brands are more likely to be associated with selling a product, and thus with advertising strategies, than political parties (Rodgers & Thorson, 2000). Applying this to the Persuasion Knowledge Model, this suggests that brands itself are obvious agents that typically send out persuasive messages (Friestad & Wright, 1994). Hence, the brand itself may function as a cue that helps consumers to activate their persuasion knowledge. In other words, consumers are often aware that all messages sent by brands are a form of advertising. With respect to messages sent on social media, this suggest that, whether or not a tweet is promoted would not make a difference for brands, primarily because persuasion knowledge is likely to be activated in both cases. Thus, adding a ‘Promoted by’ label to a tweet would not make a difference because persuasion knowledge is automatically activated when confronted with tweets from brands.

For political parties, the motives for a message may be less obvious, and thus the activation of persuasion knowledge becomes less likely. Although political messages can intend to persuade people to promote themselves and to win votes, they can also be a way of direct conversation and discourse about certain topics, and mobilization of voters to become politically active (see e.g., Lee & Shin, 2012). For instance, many politicians or political parties are on social media to be able to directly communicate with their voters. Thus, tweets sent out by a political party are, in general, not obviously advertising, making it less likely that people will use their persuasion knowledge in response to such tweets. As suggested before, when a tweet is promoted, the ‘Promoted by’ label communicates that a tweet from a politician is advertising. This would mean that, only if a tweet sent by a political party is labeled as promoted, the underlying motive of the tweet (i.e., an advertisement) becomes evident, and helps receivers to activate their persuasion knowledge. Consumers will then be able to consider persuasion strategies and tactics that they previously stored in their memories (Campbell & Kirmani, 2000). In doing so, a promoted tweet triggers a ‘change of meaning,’ so that the readers perceive the tweet as a persuasion attempt instead of as a sincere and friendly political message (Friestad & Wright, 1994).

Hence, based on the Persuasion Knowledge Model and the differences between brand and political communication, we formulate the hypothesis:

**H1.** A promoted tweet (vs. a non-promoted tweet) activates persuasion knowledge: this difference in persuasion knowledge will be more pronounced for political parties than for brands.

### 3. Consumer responses to the tweet and its source

Recognizing the persuasive nature of a message can have several effects on the way the receiver responds to this message. Empirical research and theory on persuasion knowledge has indicated that the activation and use of persuasion knowledge influences its persuasive outcomes (e.g., Boerman et al., 2012; Campbell & Kirmani, 2000; Fransen & Fennis, 2014; Wojdynski & Evans, 2016). In this research, we examine the extent to which the activation of persuasion knowledge may be an important underlying mechanism that can explain the effects of SMA on (1) consumers’ online behavioral intentions, (2) trustworthiness of the source, and (3) attitudes toward the source.

First, an important goal of SMA is to evoke sharing behavior by consumers. With the deployment of promoted tweets, companies can raise awareness of their business or ideas, but promoted tweets are an especially useful tool to stimulate consumers to share marketing-generated word of mouth (Sohn, 2009). This demonstrates the importance of understanding consumers’ intention to actually share a message that is send out through SMA. In Twitter, this sharing behavior can be expressed in four ways: (1) ‘retweeting’ the tweet and thereby sharing the marketing-generated message with one’s followers, (2) replying to the tweet and thereby engaging in two-way communication with the sender, (3) following the sender of the promoted tweet and thus staying connected to the company or organization, and (4) visiting the Twitter account of the sender of the tweet. By performing one or more of these behaviors, the consumer can potentially become a persuasion agent who carries the message to others (Lee & Hansen, 2013). When consumers recognize the persuasive nature of a tweet, they may not want to function as a persuasion agent and share the tweet. Several studies demonstrated that the activation of persuasion knowledge indeed lowers the chance that consumers share SMA. For instance, consumers have lower intention to forward online videos (Hsieh, Hsieh, & Tang, 2012) and to send an advertising campaign on a social networking site to their friends (Van Noort, Antheunis, & Van Reijmersdal, 2012) when they understand their persuasive intent.

Second, the activation of persuasion knowledge may also influence the trustworthiness of the sender of the tweet. Trustworthiness refers to issues such as honesty, reliability, and sincerity (Wood & Burkhalter, 2014). According to the ‘change of meaning’ principle (Friestad & Wright, 1994), becoming conscious of a persuasive attempt redefines the nature of the interaction with the sender. When the persuasive intent of a message is inferred, people adopt a more critical processing style and evaluate the appropriateness of the message, which influences their evaluation of the sender (Campbell, 1995; Campbell & Kirmani, 2000; Wentzel, Tomczak, & Herrmann, 2010). In line with this reasoning, prior studies showed that the activation of persuasion knowledge leads to lower perceptions of the sender’s sincerity (Campbell & Kirmani, 2000; Lee & Hansen, 2013) and trustworthiness (Main, Dahl, & Darke, 2007).

Third, the activation of persuasion knowledge may change consumers’ attitudes towards the source. Wood and Burkhalter (2014) found that using a promoted tweet negatively affected consumers’ attitude toward the brand, particularly when consumers are familiar with the brand. The use of persuasion knowledge has also demonstrated to lead to less favorable perceptions of the source of different types of advertising (Boerman et al., 2012; Campbell, 1995; Kirmani & Zhu, 2007).

Hence, based on the literature on persuasion knowledge and prior empirical studies, we expect that the activation of persuasion knowledge in response to SMA can lead to less online behavioral intentions, lower perceived trustworthiness of the sender, and less favorable attitudes towards the sender of the tweet. However, our first hypothesis proposed that the level of persuasion knowledge varies depending upon the sender of the message. The differences in the use of persuasion knowledge in response to tweets sent by brands and political parties, may also affect the way consumers respond to the promoted tweet.

For brands, persuasion knowledge will most likely be activated, regardless of whether the tweet is labeled as ‘Promoted by’ or not. Hence, we do not expect a large difference in the use of persuasion knowledge in response to these tweets (H1), and thus no large consequences with respect to source credibility, attitudes, and online behavioral intentions, in response to a regular or a promoted tweet sent by a brand.

For political parties, however, we expect that the use of persuasion knowledge does differ between promoted and non-promoted tweets. When persuasion knowledge is activated in
response to tweets sent by political parties, consumers might be less likely to respond to and share the message, perceive the party as less trustworthy, and have a less favorable attitude towards the party. Taken together, we propose a moderated mediation model (depicted in Fig. 1):

H2. A promoted tweet (vs. a non-promoted tweet) activates persuasion knowledge, and in turn negatively affects a) online behavioral intentions, b) the perceived trustworthiness of the source, and c) attitudes towards the source. This effect will be more pronounced for political parties than for brands.

4. Study 1

4.1. Design, participants, and procedure

To test our hypotheses, we conducted an online experiment with a 2 (promoted vs. non-promoted tweet) x 2 (source: political party vs. brand) between-subjects design. Power analysis showed that a total sample size of at least 179 participants was required to reach a statistical power level of 0.80 for detecting medium effect sizes (effect size $\epsilon = 0.25$) with an alpha level of 0.05 (Cohen, 1988). In total, 229 college students (81% female; $M_{age} = 21.31$; 46% owned a Twitter account) completed the questionnaire. These participants were recruited via an invitation on an online message board of the university, and were randomly assigned to one of the four conditions (non-promoted tweet + brand $n = 55$, non-promoted tweet + political party $n = 60$, promoted tweet + brand $n = 57$, promoted tweet + political party $n = 57$). Participation took about 15 minutes, and participants were given either €2.5 or a research credit for their participation. At the start, participants were told to pretend that they were visiting their own Twitter timeline and that they knew all of the people who posted tweets in the timeline. Participants then viewed one of the four timelines and subsequently filled out a questionnaire. At the end of this questionnaire, participants were debriefed and thanked. Ethical approval for this study was granted by the review board of the research institute, and data was collected in December 2013.

4.2. Stimulus materials

The stimulus material consisted of a timeline with seven tweets from various people (i.e., celebrities and unknown people). We used real tweets from actual Twitter users. The timeline used the design of the Twitter app for iPad, because this is the most neutral look and includes no advertisements or extra information, except for the ‘home,’ ‘connect,’ ‘discover,’ and ‘me’ buttons. Every timeline included a tweet from either a political party (i.e., the Dutch political party D66) or a brand (i.e., the camera company Canon). The tweet sent by the political party said: “D66 is proud to be the winner of the election of the ‘best website of the year’: D66.nl/actueel/d66-beste-website,” and the tweet sent by the brand said: “Canon is proud to be the winner of the election of the ‘best camera of the year’: canon.nl/actueel/canon-beste-website.” The content of the tweets was kept as similar as possible and did not involve any particular election. The picture next to the tweet included the logo of the brand or political party on a white background. In two of the four conditions, the tweet from the brand or the political party was not labeled as promoted and looked like a regular tweet. In the other two conditions, the tweet from the brand or the political party was labeled as promoted via an icon and the Dutch version of the text ‘promoted by [D66/Canon].’ The party and product were chosen because they were not likely to instigate strong negative or positive attitudes. More precisely, D66 was chosen because the party is in the middle of the political spectrum.

4.3. Measures

4.3.1. Persuasion knowledge

To measure the extent to which persuasion knowledge was activated, participants were asked to indicate, using a seven-point scale (1 = strongly disagree, 7 = strongly agree), whether the timeline contained advertising ($M = 4.81$, $SD = 1.86$). Similar one-item measures have been used in prior research to estimate consumers’ ability to recognize advertising (Ham et al., 2015).

4.3.2. Online behavioral intention

The extent to which participants intended to perform online behavior in response to the tweet was measured by asking them to indicate the likelihood they would: retweet the tweet, send a reply to the tweet, follow the source on Twitter, and visit the Twitter account of the sender of the tweet (1 = No, definitely not; 7 = Yes, definitely; based upon Lee & Hansen, 2013). The mean score of these items was used as a measure of online behavioral intention (Eigenvalue = 2.51, explained variance 62.64%; Cronbach’s $\alpha = 0.75$; $M = 1.94$, $SD = 1.01$).

4.3.3. Source trustworthiness

Source trustworthiness was derived from the credibility scale introduced by Ohanian (1990), and consists of five seven-point semantic differential scales (undependable/dependable, dishonest/honest, unreliable/reliable, insincere/sincere, and untrustworthy/trustworthy). A factor analysis showed that the items loaded on one factor (Eigenvalue = 3.47, explained variance 69.43%; Cronbach’s $\alpha = 0.89$; $M = 4.78$, $SD = 1.04$).

4.3.4. Source attitude

Source attitude was measured with three seven-point semantic differential scales: bad/good, negative/positive, and dislike/like (Bruner, 2009; Eigenvalue = 2.75, explained variance 91.52%; Cronbach’s $\alpha = 0.95$; $M = 5.00$, $SD = 1.21$).

4.3.5. Control variables

Several control variables were measured. Participants were asked whether they recalled seeing a label (‘Promoted by’) that informed them that the tweet was a promoted tweet (14% of all participants said yes). Furthermore, we asked participants whether they would vote for D66 (1 = never, 11 = definitely; $M = 6.78$, $SD = 2.84$), and whether they were interested in cameras, interested in photography, and whether or not they like buying a camera (1 = (strongly disagree, 7 = strongly agree; Eigenvalue = 2.47, explained variance 82.24%; Cronbach’s $\alpha = 0.89$, $M = 4.61$, $SD = 1.53$). We also asked them whether or not they were familiar with D66 or Canon (98% knew the source of the tweet in their
condition), whether or not they owned a Twitter account (46% said yes), and how often they read, posted, and retweeted tweets on Twitter (frequency of Twitter use, 1 = never, 2 = [less than] once a month, 3 = 2–3 times a month, 4 = weekly, 5 = daily; M = 1.91, SD = 1.17). Lastly, gender and age were measured. A correlation matrix of all continuous variables can be found in Table A.1 in Appendix A.

5. Results study 1

5.1. Randomization study 1

The four experimental groups did not significantly differ with regards to product interest, F(3, 225) = 0.095, p = 0.963; familiarity with the source, \( \chi^2 (3) = 3.90, p = 0.272; \) having a Twitter account, \( \chi^2 (3) = 0.85, p = 0.839; \) the frequency of Twitter use, \( F(3, 225) = 55, p = 0.652; \) gender, \( \chi^2 (3) = 0.474, p = 0.192; \) and age, \( F(3, 225) = 0.42, p = 0.742. \) Despite the random assignment, voting intention for the political party did differ marginally between the groups, \( F(3, 225) = 2.41, p = 0.068, \) and was therefore included as a covariate in all analyses. In addition, we included product interest in all analyses to make sure this did not confound any differences between the experimental groups.

5.2. Hypothesis testing study 1

To test H1, we conducted an ANCOVA with the type of tweet and source as the independent variables, persuasion knowledge as dependent variable, and product interest and voting intention for the political party as covariates. The results demonstrated no significant main effect with respect to persuasion knowledge between the promoted (M = 4.86, SD = 1.91) and the non-promoted tweet (M = 4.76, SD = 1.81), \( F(1, 223) = 0.07, p = 0.799. \) There was, however, a significant difference in the use of persuasion knowledge between the brand and the political party, \( F(1, 223) = 49.73, p < 0.001. \) The recognition of the tweet as advertising was significantly higher for the tweets sent by the brand (M = 5.61, SD = 1.56) compared to the tweets sent by the political party (M = 4.04, SD = 1.81). The interaction-effect between the type of tweet and the source was not significant, \( F(1, 223) = 0.06, p = 0.802. \)

The insignificant effect of the type of the tweet on persuasion knowledge was likely due to the low number of participants that actually recalled the ‘Promoted by’ label. Of the 114 participants exposed to a promoted tweet, only 23 (20%) recalled the presence of this label. This is an interesting finding that shows that consumers rarely notice the labels informing them about the commercial purpose of a tweet. Moreover, within this group of 114 participants, the recall of the label did significantly differ between the brand and political party, \( \chi^2 (1) = 4.41, p = 0.036. \) Participants who were exposed to the tweet sent by a brand were more likely to recall the label \( (n = 16), \) than participants that were exposed to the promoted tweet sent by the political party \( (n = 7). \) This is in line with the finding that levels of persuasion knowledge were generally higher in response to a tweet sent by a brand, compared to the political party.

Furthermore, people’s recall of the ‘Promoted by’ label is of importance, as such labels may only have an effect when people actually notice it (Boerman, VanReijmersdal, & Neijens, 2015; Wojdyński & Evans, 2016). Therefore, we ran additional analyses comparing the conditions in which the non-promoted tweets were shown and participants did not recall the label (non-promoted tweets: brand n = 50, political party n = 57) with the group of participants that was exposed to promoted tweet and recalled seeing this label (promoted tweets: brand n = 16, political party n = 7).

An ANCOVA comparing the groups in this subsample showed significant differences in the level of persuasion knowledge between the promoted tweet and the non-promoted tweet, \( F(1, 124) = 4.61, p = 0.034, \) partial eta\(^2\) = 0.04. When the label of the promoted tweet was recalled, the use of persuasion knowledge was significantly higher in response to the promoted tweet \( (M = 5.91, SD = 1.62) \) than to the non-promoted tweet \( (M = 4.75, SD = 1.80). \) In addition, the level of persuasion knowledge was significantly higher for the tweet sent by the brand \( (M = 5.71, SD = 1.39) \) compared to the tweet sent by the political party \( (M = 4.17, SD = 1.89). \) \( F(1, 124) = 10.65, p = 0.001, \) partial eta\(^2\) = 0.08. However, the results revealed no significant interaction between the label and source on persuasion knowledge, \( F(1, 124) = 0.04, p = 0.843. \) This means that, despite the significant main effects of the type of tweet and its source on persuasion knowledge, we could not support H1.

We tested the moderated mediation model proposed in H2 using Model 7 of Hayes’ (2013) PROCESS macro in SPSS. We ran separate analyses for each dependent variable (i.e., online behavioral intention, source trustworthiness, and source attitudes) with the type of tweet (promoted vs. non-promoted tweet) as the independent variable, source (political parties vs. brands) as moderator, and persuasion knowledge as mediator. In line with the ANCOVA, the results showed no significant interaction effect of the type of tweet and its source on persuasion knowledge \( (b = -0.21, p = 0.872). \)

With respect to H2a, there was no significant direct effect of the type of tweet on online behavioral intention \( (b = 0.18, p = 0.511), \) nor a conditional indirect effect of the promoted tweets sent by the brand \( (\text{indirect effect} = -0.05, 95\%CI [-0.04; 0.30]) \) or political party \( (\text{indirect effect} = 0.05, 95\%CI [0.02; 0.18]) \) on online behavioral intention via persuasion knowledge. H2a was thus not supported.

Regarding H2b, there was a marginally significant direct effect of the type of tweet on source trustworthiness \( (b = -0.51, p = 0.085). \) Comparing the conditional indirect effects of the two source revealed a marginally significant indirect effect of the tweet sent by the political party \( (\text{indirect effect} = -0.39, 95\%CI [-0.17; -0.00], \) but an insignificant indirect effect for the brand \( (\text{indirect effect} = -0.07, 95\%CI [-0.31; 0.01]). \) Despite the small subsample, these findings suggest that a promoted tweet sent by a political party has a negative indirect effect on the perceived trustworthiness of this party, mediated by the activation of persuasion knowledge. Thus, we find tentative support for H2b.

For source attitude, H2c, the results revealed no significant direct of the type of tweet \( (b = 0.18, p = 0.511), \) nor a conditional indirect effect of the tweets sent by the brand \( (\text{indirect effect} = 0.05, 95\%CI [0.06; 0.37]) \) or political party \( (\text{indirect effect} = 0.04, 95\%CI [-0.04; 0.21]). \) Hence, H2c was not supported.

6. Conclusions study 1

Promoted tweets look nearly identical to regular tweets; the only difference is the presence of a label and icon that informs consumers that this is a paid advertisement. Study 1 showed that a large percentage of participants did not recall this informative label. Consequently, the use of persuasion knowledge did not differ between the promoted and non-promoted tweets. However, when comparing consumers who did notice the ‘Promoted by’ label to the consumers who were exposed to the non-promoted tweet, their responses differed significantly. Under this scenario, promoted tweets were indeed recognized as advertising. Moreover, the study found tentative support for the notion that the activation of persuasion knowledge in response to a promoted tweet sent by a political party negatively affected the perceived trustworthiness of the source of the tweet. This means that consumers do process
promoted tweets sent by political parties differently from non-promoted tweets, and consequently this evokes negative consumer responses.

Study 1 investigated the most realistic situation, by using a Twitter timeline as consumers normally see it (despite the fact that this was not their own timeline). Because only 20% of the participants recalled the label denoting the fact that the tweet was promoted, the sample did not provide enough power to find any interaction effects. Therefore, a second study was conducted to replicate our findings and to improve the experimental design. In this study, we created a less realistic situation and forced exposure to the SMA, providing the opportunity to examine how consumers process and evaluate promoted tweets. In this way, Study 2 loses some external validity, however the second study benefits from a more internally valid research design. We also included two different brands and political parties to increase generalizability. Hence, Study 2 was designed to re-test H1 and H2, to increase the study’s statistical power, and to increase the generalizability of our results through replication.

Furthermore, Study 1 suggests that the recognition of a tweet sent by a political party as advertising had a negative effect on the perceived trustworthiness of the political party. This finding indicates that people may not find SMA sent by political parties appropriate, and therefore develop resistance towards this type of advertising. The reactance theory (Brehm & Brehm, 1981) suggests that people prefer to maintain their freedom and do not want to be manipulated or persuaded. Therefore, people tend to resist persuasion attempts when they recognize them as such (Boerman et al., 2012; Sagarin, Caldini, Rice, & Serna, 2002). The activation of persuasion knowledge may thus lead consumers to resist the persuasion tactics (Ham et al., 2015).

Prior research has indeed demonstrated that the recognition of advertising instigates critical feelings towards that particular advertisement (referred to as attitudinal persuasion knowledge; Boerman et al., 2012). Based on the reactance theory and the empirical research, we therefore expect that the activation of persuasion knowledge in response to SMA may increase consumers’ skepticism toward the tweet. To test this proposition, we added a hypothesis to H1 and H2, testing whether people indeed become more skeptical toward the tweet as a result of the activation of persuasion knowledge:

**H3. A promoted tweet (vs. a non-promoted tweet) activates persuasion knowledge, and in turn increases consumers’ skepticism toward the tweet. This effect will be more pronounced for political parties than for brands.**

7. **Study 2**

7.1. Design, participants, and procedure study 2

The procedure and stimuli used in the second experiment (conducted in September and October 2014) were similar to the ones used in the first experiment, with several adjustments. For reasons of clarity and conciseness, we will only discuss the differences between the studies. The experimental design of Study 2 included two brands and two political parties, making it a 2 (promoted tweet vs. non-promoted tweet) \( \times \) 4 (source: two political parties vs. two brands) between-subject design. By including two brands and two political parties, we could test whether any differences found were truly based on the type of source (brand vs. political party), and not just because the specific sources are different. A power analysis showed that a total sample size of at least 237 participants was required for this design (Cohen, 1988). In total, 266 college students (80% female; \( M_{\text{age}} = 21.26; \) 39% owned a Twitter account) were randomly assigned to one of the eight conditions (min \( n = 32, \) max \( n = 35 \)).

Within the questionnaire, we decided to show the manipulated tweet above each question. This forced and repeated exposure enabled us to test the way consumers respond to SMA. In addition, we could overcome the problem that many participants did not notice that the tweet was promoted. The recognition of the label was indeed higher than in Study 1: Of the 134 participants exposed to a promoted tweet, 79 (59%) indicated to have seen the label. The recall of the label did not differ between the brands and political parties, \( \chi^2 (1) = 0.63, p = 0.429 \).

7.2. Stimulus materials study 2

The stimulus material consisted of a timeline with four tweets. We decided to cut the number of tweet from seven to four, to increase the chance that participants would notice the promoted tweet and its label. Every timeline had a tweet from either a political party (i.e., from the Dutch Green party Groen Links, or the party for the animals Partij voor de Dieren [PvdD]) or a brand (i.e., Siemens or Toyota). These brands and political parties were pre-tested (\( N = 27 \)) to make sure they were familiar (only two people did not know PvdD; all other sources were familiar) and consumers hold fairly neutral attitudes toward them (source attitude range \( M = 3.70–4.74 \); source trustworthiness range \( M = 4.31–4.84 \); both measured on a 7-point scale).

The tweet sent by the political parties said: “Do you want to contribute to a better environment? Vote for [political party]!” The tweet sent by the brands said: “Do you want to contribute to a better environment? Buy the [Toyota Yaris Full Hybrid/Siemens iSensoric washing machine]!” The content of the tweets were identical, except for the last part mentioning the action to undertake with regards to the sender. Additionally, the tweet did not focus on a specific political election.

7.3. Measures study 2

The online questionnaire included the same items as Study 1: persuasion knowledge (\( M = 6.36, SD = 0.93 \)), online behavioral intention (Eigenvalue = 2.55, explained variance 63.64%; Cronbach’s \( \alpha = 0.77, M = 1.82, SD = 1.00 \)), source trustworthiness (Eigenvalue = 3.25, explained variance 65.05%; Cronbach’s \( \alpha = 0.86, M = 4.12, SD = 1.05 \)), and source attitude (Eigenvalue = 2.61, explained variance 86.96%; Cronbach’s \( \alpha = 0.93, M = 4.25, SD = 1.22 \)). In addition, we measured participants’ skepticism toward the tweet with a scale that measures skepticism towards advertising (Obermiller & Spangenberg, 1998). The nine items were adapted to make sure they applied to our study’s specific tweet, and were recoded so that a higher score corresponded to greater skepticism (Eigenvalue = 4.05, explained variance 57.82%; Cronbach’s \( \alpha = 0.87, M = 4.80, SD = 1.16 \)).

The same control variables as in Study 1 were measured: voting intention for the political party (\( M_{\text{Groen Links}} = 6.35, SD = 3.16; \) \( M_{\text{PvdD}} = 4.32, SD = 3.10 \)), product interest (\( M_{\text{car}} = 3.33, SD = 1.66; \) \( M_{\text{washing machine}} = 2.53, SD = 1.44 \)), familiarity with the source (99% were familiar with the source of the tweet in their condition), owning a Twitter account (39% said yes), frequency of Twitter use (\( M = 1.77, SD = 0.98 \)), gender, and age. In addition, because the tweet and the sources are all related to the environment, we asked participants to what extent they thought it is important to contribute to a better environment (1 = not important at all, 7 = very important; \( M = 5.38, SD = 1.09 \)). A correlation matrix of all continuous variables can be found in Table A.2 in Appendix A.
8. Results study 2

8.1. Randomization study 2

The eight experimental groups did not significantly differ with regards to voting intention for the two political parties (Groen Links, $F(7, 258) = 1.03, p = 0.408$; PvdD, $F(7, 258) = 1.13, p = 0.408$); product interest (car $F(7, 258) = 1.70, p = 0.108$; washing machine, $F(7, 258) = 1.11, p = 0.354$); familiarity with the source, $\chi^2(7) = 8.41, p = 0.298$; having a Twitter account, $\chi^2(7) = 5.68, p = 0.578$; age, $F(7, 258) = 0.38, p = 0.914$; and interest in the environment, $F(7, 258) = 0.44, p = 0.876$. Despite the random assignment, the frequency of Twitter use, $F(7, 258) = 2.77, p = 0.009$, and gender, $\chi^2(7) = 15.38, p = 0.031$, did differ between the groups, and were therefore included as covariates in all analyses. Consistent with Study 1, we included voting intention and product interest as covariates in all analyses.

8.2. Hypothesis testing study 2

To test $H1$, the persuasion knowledge measure was submitted to an ANCOVA with the type of tweet and the source (political parties vs. brands) as the independent variables, and frequency of Twitter use, gender, voting intention, and product interest as covariates. The results revealed no significant differences in the level of persuasion knowledge between the promoted tweet and the non-promoted tweet, $F(1, 252) = 0.73, p = 0.395$. However, the source of the tweet did have a significant main effect on the level of persuasion knowledge, $F(1, 252) = 9.12, p < 0.001$, partial $\eta^2 = 0.01$. More importantly, the results demonstrated a significant two-way interaction between the type of tweet and its source, $F(3, 252) = 2.89, p = 0.036$, partial $\eta^2 = 0.03$. Pairwise comparisons using the Bonferroni adjustment showed that the political parties did not differ from each other ($p = 1.000$), and that the brands did not differ from each other ($p = 1.000$). Additionally, both political parties did significantly differ from both brands ($p's < 0.013$). Therefore, the four sources were combined into a new variable in order to compare the political parties to the brands.

An ANCOVA using this new dichotomous source variable again showed no significant main effect of the type of tweet on persuasion knowledge, $F(1, 256) = 0.79, p = 0.374$, and a significant effect of source, $F(1, 256) = 26.81, p < 0.001$, partial $\eta^2 = 0.10$. More importantly, we found a marginally significant interaction effect of the type of tweet and source (political parties vs. brands) on persuasion knowledge, $F(1, 256) = 2.85, p = 0.093$, partial $\eta^2 = 0.01$. Fig. 2 shows this interaction effect. Pairwise comparisons revealed that the level of persuasion knowledge significantly differed between the political parties and the brands, regardless of whether the tweet was promoted ($p = 0.015$) or not promoted ($p < 0.001$). Moreover, when the tweet was sent by a political party, there was a marginally significant ($p = 0.073$) difference in persuasion knowledge between the promoted ($M_{promoted} \text{-political party} = 6.23, SD = 0.91$) and non-promoted tweet ($M_{non-promoted} \text{-political party} = 5.93, SD = 1.10$). This difference was not significant when the tweet was sent by a brand ($p = 0.576$; $M_{promoted} \text{-brand} = 6.62, SD = 0.81$; $M_{non-promoted} \text{-brand} = 6.67, SD = 0.64$). Hence, when a tweet was sent by a brand, regardless of whether or not it was labeled as promoted, participants were likely to recognize it as advertising. When a tweet was sent by a political party, persuasion knowledge was marginally significantly higher when the tweet is labeled as promoted (vs. non-promoted). This means $H1$ was supported.

$H2$ proposed that the interaction effect of the type of tweet and source on persuasion knowledge could consequently influence consumers’ responses to the tweet and source. We tested this moderated mediation model using Model 7 of Hayes’ (2013) PROCESS macro in SPSS. We ran separate analyses for each dependent variable (i.e., online behavioral intention, source trustworthiness, source attitudes, and ad skepticism) with the type of tweet (promoted vs. non-promoted tweet) as the independent variable, source (political parties vs. brands) as moderator, and persuasion knowledge as mediator. Results revealed marginally significant moderated mediation for all dependent variables.

For online behavioral intention (index of moderated mediation = 0.07, boot SE = 0.05, 90%CI [0.011, 0.185]), the results revealed a marginally significantly indirect effect for the political parties (indirect effect = −0.06, boot SE = 0.04, 90%CI [−0.151, −0.004]), but not for the brands (indirect effect = 0.02, boot SE = 0.03, 90%CI [−0.022, 0.069]). This means when a tweet is sent by a political party, participants are less likely to recognize it as an advertisement when it is not labeled as such, compared to when it is promoted. This persuasion knowledge, in turn, decreases the intention to share the tweet ($b = −0.21, p = 0.006$).

A similar pattern was found for the perceived source trustworthiness (index of moderated mediation = 0.07, boot SE = 0.05, 90%CI [0.012, 0.172]), source attitude (index of moderated mediation = 0.06, boot SE = 0.04, 90%CI [−0.011, 0.160]), and ad skepticism (index of moderated mediation = −0.11, boot SE = 0.07, 90%CI [−0.230, −0.014]). The difference in persuasion knowledge between promoted and non-promoted tweets sent by a political party also lowered the perceived source trustworthiness ($b = −0.20, p = 0.004$; indirect effect = −0.06, boot SE = 0.04, 90%CI [−0.141, −0.005]), led to less favorable source attitudes ($b = −0.17, p = 0.058$; indirect effect = −0.05, boot SE = 0.04, 90%CI [−0.130, −0.007]), and increased their skepticism toward the tweet ($b = 0.30, p < 0.001$; indirect effect = 0.09, boot SE = 0.06, 90%CI [0.002, 0.193]). This means $H2a$ and $H3$ are partially supported: the difference in persuasion knowledge (i.e., the recognition of advertising) between promoted and non-promoted tweets sent by a political party negatively affects $H2a$ (online behavioral intention, $H2b$) the perceived trustworthiness of the source, and $H2c$ (attitudes towards the source, and increases $H3$) ad skepticism. This mediated effect was not found for tweets sent by a brand.

9. Conclusion study 2

Study 2 replicated the effects of a promoted tweet on persuasion knowledge, and showed that this effect only occurs when the tweet is sent by a political party. When a tweet is sent by a brand, consumers recognize it as advertising (i.e., activate persuasion
knowledge), regardless of it being promoted or not. But, when a political party sends a tweet, consumers seem to be more likely to use their persuasion knowledge when it is promoted. In addition, Study 2 replicates the effect of persuasion knowledge on source trustworthiness. Furthermore, it extends the findings of Study 1 by demonstrating that persuasion knowledge also reduces consumers' intention to respond to or share the message, thereby lowering its effectiveness. Moreover, even though attitudes towards political parties are usually hard to change, the recognition of a promoted tweet as advertising even led to less favorable attitudes. Finally, Study 2 showed that consumers do not appreciate promoted tweets sent by political parties, as the activation of persuasion knowledge induced skepticism towards the tweet.

10. General conclusion and discussion

The purpose of this study was twofold. First, it examined consumers' responses to promoted tweets and the role of persuasion knowledge as a potential underlying mechanism to explain possible effects. Second, it examined boundary conditions for the effects of promoted tweets by testing whether responses to promoted tweets differ when they are sent by brands and political parties.

In Study 1, we found that consumers rarely noticed the ‘Promoted by’ label that denoted a tweet as sponsored. Some authors have speculated that this result is due to ‘banner blindness’ (Hervet, Guérard, Tremblay, & Chtourtou, 2011; Tuten, 2008). Consumers focus on the primary content and therefore ignore any extra information, such as banners and labels, and thus do not cognitively process that they are exposed to an ad (Tuten, 2008). This finding suggests that consumers may not respond differently to promoted tweets, because they simply do not notice the sponsorship label. However, when consumers do notice the label, then persuasion knowledge is activated, which in turn lowers the perceived trustworthiness of the source. This provides some support for the conceptual premise that SMA can activate persuasion knowledge, which consequently affects consumers' responses to its sender. One should bear in mind that few people remembered the ‘Promoted by’ label and thus these outcomes do not apply to all consumers.

The lack of attention to the ‘Promoted by’ label could be explained by the fact that we used Twitter timelines that were not personal, and thus all information was new to the participants. Twitter users may recognize promoted tweets more easily, because they know they do not follow the sender of the tweet. This means that, in our studies, it was least likely that participants would notice the promotion. Further research is needed to examine how people respond to promoted tweets in their own, personal timelines. A useful tool in such research could be eye-tracking, which would allow researchers to measure whether and how long people actually pay visual attention to social media content and labels such as ‘Promoted by’.

In Study 2, we investigated more precisely how consumers process and respond to promoted tweets. The results showed that consumers' responses to a promoted tweet (vs. a non-promoted tweet) differ between brands and political parties. More specifically, we found that the use of persuasion knowledge is higher when political parties send out a promoted tweet than when they send the same tweet without it being promoted. Although consumers appear to be less skeptical towards tweets sent by political parties than to tweets sent by brands, the recognition that a tweet sent by a political party is an advertisement triggers a ‘change of meaning’ (Fristad & Wright, 1994), which, in turn, a) makes consumers less inclined to respond to or share the tweet; b) lowers the perceived trustworthiness of the party, c) leads to less favorable attitudes towards the party, and d) increases skepticism towards the tweet. This is in accordance with prior studies that suggest that the activation of persuasion knowledge negatively affects advertising outcomes (Boerman et al., 2012; Flanagin & Metzger, 2000; Tutaj & Van Reijmersdal, 2012; Wojdynski & Evans, 2016). For brands, however, persuasion knowledge was continually activated, thus the recognition of advertising and its consequences on consumer responses did no differ between promoted and non-promoted tweets.

With respect to the Persuasion Knowledge Model (Fristad & Wright, 1994), this latter finding shows the importance of previous memories and experience with specific types of persuasive attempts. When confronted with tweets from brands, people recognize the message as advertising, probably because people have experience and memories about the tactics brands use to persuade them. Thus, levels of persuasion knowledge are high, and no ‘change-of-meanings’ occurs. However, people do not seem to immediately recognize a tweet sent by a political party as advertising. In these cases, persuasion knowledge can be activated when the tweet is clearly labeled as promoted, and consequently a ‘change of meaning’ occurs. People may use this experience with promoted political tweets and the consequent change of meaning in response to future exposures to these types of messages. This would mean that in times people may also activate their persuasion knowledge in response to tweets sent by political parties, and thus no change of meaning will take place, as is the case for tweets sent by brands. This has important implications to the Persuasion Knowledge Model, as it shows that the experience with a specific advertising tactic and memories of this exposure may prevent future change of meaning to occur.

The findings of Study 2 extend those of Study 1, but there were some differences in findings between the studies. The results of Study 1 did not provide evidence for an interaction effect between the type of tweet and its source on the use of persuasion knowledge, and it only provided tentative evidence for an indirect effect on source trustworthiness. These differences are due to the fact that very little participants could recall seeing a ‘Promoted by’ label. As we wanted to infer how people respond to promoted tweets compared to non-promoted tweets, it was crucial from people to make this distinction. Therefore, we decided to exclude all participants who did not notice the label. However, this subsample was too small to probably test our hypotheses, which resulted in insignificant findings. As we repeated the exposure to the tweets during the questionnaire in Study 2, we were better able to truly capture their responses to the specific type of tweet.

Furthermore, the two conducted experiments have some limitations. First, both studies concern college student samples, which can limit the generalizability of our findings (e.g., Landers & Behrend, 2015). Especially with respect to persuasion knowledge, our findings may not be representative for the full population. An individual’s persuasion knowledge is often argued to be related to education in the persuasion-focused parts of social psychology, marketing, sociology, and communication (Fristad & Wright, 1999). This indicates that college students’ persuasion knowledge may be more developed. This would explain the high scores of persuasion knowledge in all conditions. Second, in some cases, especially with regard to the interaction hypotheses, we find marginal effects. Although this could be a consequence of low statistical power, it might also be a result of the student sample. Student samples are often more homogenous, which could affect the results of our studies. Thus, taking these latter two considerations into account, further research is needed to understand the development of persuasion knowledge about SMA in a broader population, and how this may influence the effects of SMA.

Another important limitation to our studies is the fact that they were conducted in one country. As political systems and campaigns
differ between countries (Walter, 2014), our results may not be generalizable to all countries. In countries where negative political campaigning is more common (e.g., the US and UK), it might be less important to appear sincere than in countries where negative campaigning is less common (e.g., the Netherlands and Germany; Walter, 2014). More cross-national studies are needed to examine the impact of political marketing strategies on social media.

The results from this study have important theoretical implications. With regard to the theory, this study emphasizes that, when studying the consequences of SMA, one should take persuasion knowledge into account as it shows to be an important mechanism that explains why SMA can be beneficial for one advertiser and less so for others. In addition, the outcome that persuasion knowledge is generally lower for political parties than for brands is in line with ideas that brands and political parties have different goals and different reasons for communicating to an audience (Rodgers & Thorson, 2000; Van Steenburg, 2015). Brands aim to sell a product or service, whereas political parties try to mobilize citizens to take action (including voting). Because brands are often associated with selling a product, and thus with advertising and marketing strategies, brands are more likely to activate higher levels of persuasion knowledge than political parties. To our knowledge, this study is one of the first to provide evidence for this notion. Our finding that the recognition of promoted tweets as advertising did not necessarily lead to more negative responses toward the tweet and brand, could be a reason for ethical concerns, as it indicates that the promoted tweets do not necessarily evoke resistance.

Finally, this study has some important practical implications for brand managers and political parties. Until now, very little was known about the impact of SMA. This study contributes to this void by showing how consumers respond to SMA sent by different advertisers. We found that promoted tweets sent by brands did not evoke more negative consumer responses. This means that, for brands, promoted tweets can be a useful tool to target and reach new audiences that do not already ‘follow’ them. However, our findings suggest that SMA might be detrimental for political parties, and thus confirm prior research indicating that promoted tweets should be used cautiously (Wood & Burkhalter, 2014).

Although previous research demonstrated that tweets can positively affect citizen engagement and voting (e.g., Kruikemeier, 2014), this study shows that promoted tweets may also have undesirable effects. The realization that a tweet was paid for makes consumers more skeptical towards this message. More importantly, this realization changes people’s opinion about the party itself. Thus, this study provides evidence that the use of promoted tweets might not be beneficial for every organization or company.

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Appendix A

Table A.1 Means, standard deviation and Pearson correlation matrix for continuous variables (Study 1, N = 229)

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Persuasion knowledge</td>
<td>4.81</td>
<td>1.86</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>2. Online behavioral intention</td>
<td>1.94</td>
<td>1.01</td>
<td>0.13</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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</tr>
<tr>
<td>3. Source trustworthiness</td>
<td>4.78</td>
<td>1.04</td>
<td>-0.12</td>
<td>0.30</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. Source attitudes</td>
<td>5.01</td>
<td>1.21</td>
<td>0.07</td>
<td>0.42</td>
<td>-</td>
<td>0.66</td>
<td>-</td>
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<td>-</td>
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</tr>
<tr>
<td>5. Voting intention</td>
<td>6.78</td>
<td>2.84</td>
<td>0.00</td>
<td>0.16</td>
<td>0.19</td>
<td>0.31</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. Product interest</td>
<td>4.61</td>
<td>1.53</td>
<td>-0.01</td>
<td>0.21</td>
<td>0.26</td>
<td>0.24</td>
<td>-</td>
<td>0.01</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7. Frequency of Twitter use</td>
<td>1.91</td>
<td>1.17</td>
<td>0.11</td>
<td>0.06</td>
<td>0.06</td>
<td>-0.01</td>
<td>-0.02</td>
<td>-0.02</td>
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<td>-</td>
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<tr>
<td>8. Age</td>
<td>21.31</td>
<td>4.75</td>
<td>-0.07</td>
<td>-0.11</td>
<td>-0.17</td>
<td>-0.21</td>
<td>-0.15</td>
<td>0.07</td>
<td>-0.11</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. ***p < 0.001, **p < 0.01, *p < 0.05, [p < 0.10.

Table A.2 Means, standard deviation and Pearson correlation matrix for continuous variables (Study 2, N = 266)

<table>
<thead>
<tr>
<th></th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
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<th>10</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Persuasion knowledge</td>
<td>6.36</td>
<td>0.93</td>
<td>-</td>
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<td>-</td>
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<td>-</td>
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<tr>
<td>2. Online behavioral intention</td>
<td>1.82</td>
<td>1.00</td>
<td>-0.21</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>3. Source trustworthiness</td>
<td>4.12</td>
<td>1.05</td>
<td>-0.17</td>
<td>0.29</td>
<td>-</td>
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<td>-</td>
<td>-</td>
<td></td>
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<tr>
<td>4. Source attitudes</td>
<td>4.25</td>
<td>1.22</td>
<td>0.15</td>
<td>0.35</td>
<td>0.55</td>
<td>-</td>
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<tr>
<td>5. Skepticism</td>
<td>4.80</td>
<td>1.16</td>
<td>0.25</td>
<td>-0.33</td>
<td>-0.62</td>
<td>-0.41</td>
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<td>-</td>
<td>-</td>
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<td></td>
</tr>
<tr>
<td>6. Voting intention (Green Links)</td>
<td>6.35</td>
<td>3.16</td>
<td>0.03</td>
<td>0.09</td>
<td>0.09</td>
<td>0.18</td>
<td>0.00</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<td>-</td>
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<tr>
<td>7. Voting intention (PVDD)</td>
<td>4.32</td>
<td>3.10</td>
<td>-0.10</td>
<td>0.17</td>
<td>0.03</td>
<td>0.18</td>
<td>-0.03</td>
<td>0.55</td>
<td>-</td>
<td>-</td>
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<td></td>
</tr>
<tr>
<td>8. Product interest (washing machine)</td>
<td>2.53</td>
<td>1.43</td>
<td>-0.05</td>
<td>0.19</td>
<td>0.02</td>
<td>0.10</td>
<td>-0.06</td>
<td>0.00</td>
<td>0.09</td>
<td>-</td>
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<td>-</td>
<td></td>
</tr>
<tr>
<td>9. Product interest (cars)</td>
<td>3.33</td>
<td>1.66</td>
<td>0.01</td>
<td>0.13</td>
<td>0.12</td>
<td>0.20</td>
<td>0.15</td>
<td>-0.16</td>
<td>-0.08</td>
<td>0.25</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>10. Frequency of Twitter use</td>
<td>1.77</td>
<td>0.98</td>
<td>-0.00</td>
<td>0.06</td>
<td>0.01</td>
<td>-0.04</td>
<td>0.01</td>
<td>-0.01</td>
<td>-0.04</td>
<td>0.01</td>
<td>0.08</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>11. Age</td>
<td>21.26</td>
<td>2.66</td>
<td>0.06</td>
<td>0.15</td>
<td>0.03</td>
<td>-0.00</td>
<td>-0.05</td>
<td>-0.07</td>
<td>-0.04</td>
<td>0.19</td>
<td>0.02</td>
<td>-0.08</td>
<td>-</td>
</tr>
</tbody>
</table>

Note. ***p < 0.001, **p < 0.01, *p < 0.05, [p < 0.10.