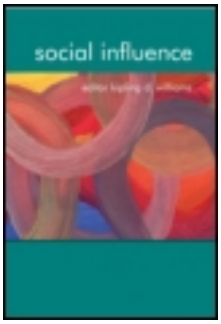


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# Multiple roles for majority versus minority source status on persuasion when source status follows the message

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# Multiple roles for majority versus minority source status on persuasion when source status follows the message

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This research shows that numerical majority (vs minority) status of the source can affect persuasion by different processes when induced after message processing. Specifically, we argue that source status affects persuasion by serving as a simple peripheral validity cue under low-elaboration conditions, and by validating thoughts—a metacognitive process—under high-elaboration conditions. In the present study the extent of elaboration was manipulated (high vs low), and then participants received a persuasive message composed of either strong or weak arguments that were presented by a source in the numerical majority or minority. This source status information was introduced following the message. We predicted and found that, under high-elaboration conditions the majority source increased the argument quality effect on attitudes in response to the message compared to the minority source. In contrast, under low-elaboration conditions the information regarding source status served as a simple cue, with the majority source leading to more persuasion compared to the minority source regardless of argument quality. Thus the present results provide the first evidence for moderation of different effects for majority/minority influence when the numerical status of the source follows message processing.

***Keywords:*** Persuasion; Source status; Minority influence; Attitude change; Validation; Metacognition.

Research on majority/minority influence has shown that sources in the numerical majority often exert greater influence than sources in the numerical minority (e.g., Martin & Hewstone, 2008; Wood, Lundgren,

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Ouellette, Busceme, & Blackstone, 1994). For example, if people were to learn that 86% of others endorsed a proposal, they would be more likely to agree with it than if only 14% endorsed it. However, under some circumstances, minority endorsement can be more influential both on direct measures (e.g., Baker & Petty, 1994; Martin & Hewstone, 2003) and especially when attitude change is assessed with indirect, latent, or private measures (e.g., Crano & Chen, 1998; Moscovici, 1980; Mugny & Pérez, 1991).

In accord with contemporary multi-process theories of persuasion such as the elaboration likelihood model (ELM; Petty & Cacioppo, 1986) and the heuristic-systematic model (HSM; Chaiken, Liberman, & Eagly, 1989), research shows that majority/minority source status can operate through different processes depending on the overall likelihood of elaboration people are willing and able to expend in processing persuasive communications (e.g., Tormala, Petty, & DeSensi, 2010; see also Kruglanski & Mackie, 1990; Maass & Clark, 1983). Nevertheless, although prior research on majority/minority influence has proposed different underlying processes that are likely to affect attitude change in different situations, so far these different mechanisms have appeared mostly in different studies, using different participants, manipulations and measures (see Martin & Hewstone, 2008, for a review).

In one notable exception, Martin, Hewstone, and Martin (2007) manipulated the level of elaboration (low, intermediate, and high) within the same experimental design to test ELM predictions about the multiple roles for majority vs minority source status and found that when either motivational (Study 1) or ability (Study 2) factors encouraged low message elaboration, there was *heuristic acceptance* of the majority position without detailed message processing. However, when elaboration was not constrained by motivational or cognitive variables to be high or low (i.e., intermediate level of elaboration), source status affected *how much thinking* people did about the message. Specifically, minority source status increased careful processing, as revealed by greater argument quality effects shown for minority rather than majority sources. Finally, when elaboration was high, source status did not have a consistent effect on attitude change across studies, but rather persuasion was mainly a function of the quality of arguments in the message (see, Erb, Bohner, Schmälzle, & Rank, 1998, for an exception showing that under high thinking conditions, sources status can bias the direction of the thoughts generated in response to the message).

As in most of the literature on majority/minority source status and persuasion, Martin and colleagues (2007) focused exclusively on cases where source status was manipulated *prior to* receipt of the persuasive message. However, recent research has shown that source information can also affect attitude change when it is provided *after* the persuasive message.

Specifically, Horcajo, Petty, and Briñol (2010) demonstrated that the *placement* of source status information is an important moderating factor in the domain of attitude change. Specifically, the timing of source status information (*prior to* vs *after* message processing) is relevant to understanding the different effects and multiple processes that can produce attitude change, as well as the potential consequences for attitude strength resulting from those multiple processes (for an illustration applied to *source credibility*, see, Tormala, Briñol, & Petty, 2007).

In the previous research conducted by Horcajo and colleagues (2010) participants received a persuasive message composed of either strong (i.e., convincing) or weak (i.e., flawed) arguments that was presented by a majority or a minority source. When majority/minority source status information was introduced preceding the persuasive message, the majority source decreased the argument quality effect on attitudes, in line with prior research (e.g., Martin et al., 2007) and consistent with the idea that majority source status can affect the extent of message processing by validating the opinion that the source presents (i.e., if the source's opinion is valid, there is less need to process the message). In contrast, when source status information followed the persuasive message, majority source increased the argument quality effect on attitudes, consistent with the idea that source status can validate one's own thoughts in response to the message. In order to demonstrate the moderating role of timing, in a third study Horcajo and colleagues isolated the placement of the source status induction by manipulating the timing (prior to vs after message processing) within the same experiment. The results revealed that majority source increased persuasion to compelling arguments (compared to minority source) when source information was introduced following the message (consistent with validating positive thoughts to strong arguments), but decreased persuasion when introduced preceding the message (consistent with reduced processing of strong arguments). Taken together, these studies showed that the placement of the source status information (before or after the message) produced different results through different processes (reducing elaboration vs validating thoughts, respectively).

The initial research by Horcajo and colleagues (2010) was important in introducing the novel idea that sources in the numerical majority (vs minority) can operate by influencing the confidence with which people hold their thoughts about the persuasive message when source status information follows the message processing. This process is called *self-validation* (Petty, Briñol, & Tormala, 2002). Briefly stated, the key notion of self-validation is that generating (positive or negative) thoughts in response to a persuasive proposal is not sufficient for these thoughts to have a (positive or negative) impact on attitudes. Rather, one must also have sufficient *confidence* in the validity of those thoughts. Confidence is a subjective sense of conviction

about the validity of one's beliefs, opinions, goals, or whatever mental content is available (Briñol & Petty, 2009; Gross, Holtz, & Miller, 1995). Thus thoughts that are not perceived as valid are mentally discarded. In line with the self-validation hypothesis, when source status is induced after message processing it cannot affect the extent of message processing, but it should affect attitude change by influencing the extent to which people rely on the thoughts they have already generated to the message. Thinking about the validity of one's thoughts involves thinking about thinking, a form of second-order cognition or metacognition (see Briñol & DeMarree, 2012; Jost, Kruglanski, & Nelson, 1998). Thus, unlike previous mechanisms of attitude change that focus on first-order cognition (i.e., direction and amount of thoughts), this new process emphasizes second-order or metacognition. Applied to majority/minority influence, the self-validation hypothesis proposes that the numerical status of the source can affect message recipients' confidence in their thoughts to the persuasive proposal rather than affecting how much they think or in what (positive or negative) direction they generate thoughts, especially when source status information follows the message processing.

As noted, previous research on source status and self-validation (Horcajo et al., 2010) showed that majority source status can increase the confidence with which recipients held their thoughts compared to minority source status. When the thoughts were positive (in response to strong arguments), majority source status was associated with more persuasion than minority source status because people relied more on their positive thoughts generated in response to the convincing message. On the other hand, when thoughts were negative (in response to the message containing weak arguments), the confidence generated by the majority source status was associated with less persuasion compared to minority source status.

Although this initial research provided clear support for the meta-cognitive effects of majority/minority source status when induced after information processing, it did not examine whether self-validation is invariably the mechanism by which majority/minority source status affects persuasion when introduced after a message or whether other possibilities remain. Notably, meta-cognitive processes such as self-validation should occur mainly when thinking about the message is high (Briñol & Petty, 2009). There are at least two reasons for this. First, for self-validation processes to matter, people need to have some thoughts to validate, which is more likely when thinking is high than low. Second, people need some motivation and ability not only to think at a primary level of cognition, but also to think and care about their own thoughts (secondary cognition). Thus the present research aimed to provide the first evidence that self-validation processes for majority/minority influence effects are confined to conditions

in which elaboration is high, but that other processes operate when elaboration is low.

Specifically, under low thinking conditions, source status is predicted to influence attitudes by serving as a *peripheral cue* even when introduced after receiving the persuasive message. According to multi-process models such as the ELM and the HSM, when elaboration is low, variables affect attitudes through peripheral route mechanisms or heuristic processing (e.g., the source serves as quick heuristic to persuasion or resistance). For example, people might simply accept or reject a majority versus minority message because the position is assumed to be valid or invalid (due to the high or low consensus). As noted before, when thinking is low, simple peripheral cue effects for majority/minority sources have been observed when source status has preceded a message. This simple main effect of source status has generally been explained as majority source status invoking a simple rule that would lead people to agree with the majority position to satisfy their desire to belong to the majority group, as identification with a majority is desirable, at least at a public/direct level (e.g., Mackie, 1987; Martin et al., 2007). Furthermore, this finding is compatible with much prior research on the operation of peripheral cue processes (e.g., Petty & Cacioppo, 1984; Tormala, Petty, & Briñol, 2002). However, no prior research has examined whether majority/minority source status can serve as a simple cue when presented following the persuasive message. When following a message, source status cannot influence how much thinking takes place because thinking has already occurred, but it should still be capable of serving as a simple cue to validity thereby affecting attitudes.

Therefore the primary goals of the present work are to (1) examine the different processes (self-validation vs peripheral cue) by which source status can operate when introduced *after* the persuasive message, and (2) specify the conditions under which these processes are most likely to operate. In order to address these goals we conducted an experiment in which we first manipulated the level of elaboration (high vs low) using a classic manipulation of motivation to think. Then we assigned participants to receive a persuasive message composed of either strong or weak arguments on a relatively novel topic. After participants read the message information, source status was manipulated by attributing the message to a source in the numerical majority or minority. Finally, participants reported their attitudes toward the proposal.

In line with previous research on self-validation, we predicted that in the high-elaboration conditions the majority source would increase reliance on thoughts compared to the minority source, increasing the impact of argument quality on attitudes. In contrast, in the low-elaboration conditions we hypothesized that the majority source would increase persuasion compared to the minority source regardless of argument quality.

The latter effect is consistent with the operation of a *peripheral cue* process. Thus, in accord with ELM, self-validation and peripheral cue processes would operate at the opposite extremes of the elaboration continuum (Petty & Briñol, 2012).

## METHOD

### Participants and design

A total of 144 undergraduate psychology students at the Universidad Autónoma de Madrid (Spain) participated in partial fulfillment of a course requirement. Participants were randomly assigned to the cells of a 2 (elaboration: high vs low) × 2 (argument quality: strong vs weak) × 2 (source status: majority vs minority) between-participants factorial design.



### Procedure

Participants began this study by reading a cover story that led them to believe they were taking part in a study designed to examine potential changes in a university's institutional color. In order to manipulate the extent of elaboration some participants were told that the proposal referred to *their* university whereas others were told it referred to *another* Spanish university. Then approximately half of the participants were randomly assigned to receive a persuasive message containing strong arguments in favor of using green as the institutional color for the university, and the others received a message containing weak arguments about this color. After reading the message participants were informed that a previous survey on campus revealed that a majority or a minority of students already supported the proposal of the message about green becoming the institutional color. The information was framed so they thought they received some of the arguments generated previously by those students. Finally participants reported their attitudes toward the persuasive proposal, and they rated the extent to which they had paid attention to the proposal. After completing these measures they were debriefed and thanked.

### Independent variables

*Elaboration.* Half of the participants were told that they were helping with research designed to assess possible changes in the institutional color of their own university (high thinking condition), whereas the other half of the participants were told that they were participating in research designed to assess possible changes in the institutional color of *another* remote university (low thinking condition; Petty & Cacioppo, 1979). In addition, as university color is not a very familiar topic for most students in Spain, participants in the high-elaboration condition were explicitly encouraged to think carefully

about the information provided by telling those participants that they were in a selected sample of students whose responses would directly affect the university's evaluation of the issue; thus their responses would be very important in their university's ultimate decision about the issue. In contrast, participants in the low-elaboration condition were told that they were in a sample of students being asked to complete the survey (e.g., Tormala et al., 2002).

*Argument quality*. The persuasive message that participants received contained either strong or weak arguments in favor of using green as the institutional color for the university. This manipulation was designed to affect the profile of thoughts (favorable or unfavorable) if people were thinking about the arguments carefully (Petty & Cacioppo, 1986). The arguments selected were adopted from previous research and have been shown to produce the appropriate pattern of cognitive responding. That is, when people were instructed to think about the message information, the strong arguments elicited significantly more favorable thoughts toward the proposal than the weak arguments did (Horcajo et al., 2010, Expt. 2). Thus the strong arguments in favor of the institutional color highlighted, for instance, "psychology research found that the performance and satisfaction of everybody would improve if green was the color adopted by the university," "increasing creativity in students," and "inducing higher levels of mental concentration." In contrast, the weak arguments in favor of this color pointed to, for instance, "green traditionally has been defended to parents as a solid institutional color when choosing a university for their children" and "green is the color of essential elements relevant to education such as chalkboards."

*Source status*. Following the message, participants were led to believe that the message they read came from a source in the numerical majority or minority (i.e., 86% versus 14% of their fellow students agreed with the message; see Horcajo et al., 2010).

## Dependent variables

*Attitudes*. Participants' attitudes toward the advocacy were assessed using five 9-point (1–9) semantic differential scales (i.e., in favor/against, like/dislike, positive/negative, innovative/not innovative, modern/old-fashioned) on which they rated the color policy. Ratings on the different scales were highly correlated ($\alpha = .88$) and were averaged to create a composite measure of attitudes toward the color green. Responses to the attitude scales were scored so that higher values represented more favorable attitudes about the color green being adopted by the university.

*Manipulation check for attention.* Finally we asked participants to rate the extent to which they had paid attention to the proposal. Specifically, amount of attention was rated on two different scales: a 9-point scale assessing participants' level of attention, anchored with "low attention paid" (1) and "high attention paid" (9), and another 5-point scale, anchored at "not at all attentive right now" (1) and "very attentive right now" (5). Ratings on these two different scales were correlated ($r = .43$; $p < .001$), so they were combined to create a composite measure of the extent of attention. We $z$-transformed each of these two ratings scales and then averaged them. Higher scores represented a greater extent of attention.

## RESULTS

The dependent measures were submitted to a 2 (elaboration: high or low) × 2 (argument quality: strong or weak) × 2 (source status: majority or minority) analysis of variance (ANOVA).

### Manipulation check for attention

As expected, the only significant effect to emerge from the $2 \times 2 \times 2$ ANOVA on attention was a main effect of the manipulation of elaboration, $F(1, 136) = 5.50$, $p = .02$, showing that this manipulation was successful. That is, high-elaboration participants showed significantly higher values on the self-reported attention paid to the message ($M = .15$, $SD = .81$) than did low-elaboration participants ($M = -.15$, $SD = .85$).

### Attitudes

Consistent with our hypotheses, results of the $2 \times 2 \times 2$ ANOVA on attitudes revealed a significant three-way Elaboration × Argument Quality × Source Status interaction, $F(1, 136) = 11.04$, $p = .001$. To examine the basis of this interaction we analyzed the results at the two levels of manipulated elaboration. Consistent with our *self-validation hypothesis*, a two-way interaction between argument quality and source status was observed under high-elaboration conditions, $F(1, 68) = 9.20$, $p = .003$. As depicted in Figure 1 (top panel), this interaction demonstrated that the effect of argument quality on attitudes was restricted to majority source status participants. That is, for majority source status participants, those who received the strong arguments had significantly more favorable attitudes toward the proposal ($M = 6.12$, $SD = 1.47$) than did those who received the weak arguments ($M = 4.53$, $SD = 1.78$), $t(32) = -2.83$, $p = .008$. However, minority source status participants did not show a significant difference in attitudes if they received the message composed of strong arguments

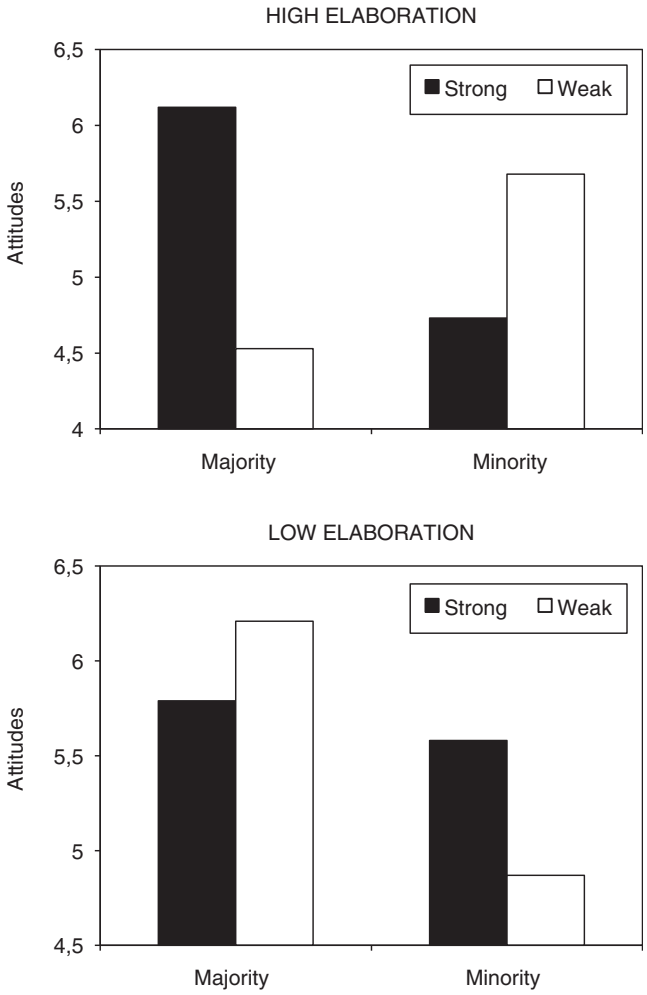


**Figure 1.** Attitudes as a function of elaboration, argument quality, and source status.



($M = 4.73$, $SD = 2.04$) or the message composed of weak arguments ($M = 5.68$, $SD = 1.71$), $t(36) = 1.55$, $p = .12$.

Viewed differently, this interaction revealed that for the strong message, participants in the majority source status condition showed significantly more favorable attitudes ($M = 6.12$, $SD = 1.47$) than did those in the minority source status condition ($M = 4.73$, $SD = 2.04$), $t(34) = -2.33$, $p = .02$. In contrast, for participants who received the weak message, those in the majority source status condition showed less favorable attitudes

($M = 4.53$, $SD = 1.78$) than did those in the minority source status condition ($M = 5.68$, $SD = 1.71$), $t(34) = 1.95$, $p = .05$.

Moreover, consistent with our *peripheral cue hypothesis*, for low-elaboration participants, there was only a significant main effect of Source Status, $F(1, 68) = 4.63$, $p = .03$, with more favorable attitudes reported in response to the majority source ($M = 6.00$, $SD = 1.43$) rather than the minority source ($M = 5.25$, $SD = 1.60$; see Figure 1, bottom panel). For this low elaboration condition, as expected, no significant Argument Quality × Source Status interaction emerged, $F(1, 68) = 2.45$, $p = .12$.

## DISCUSSION

Most of the previous research on majority/minority influence has manipulated source status information *prior to* message receipt, finding that the numerical source status of a message can influence attitudes through different mechanisms depending on the message recipients' level of elaboration. However, recent research has also shown that majority/minority source status can influence judgment even when source status is manipulated *after* message processing, though the mechanism uncovered was different from any that had been seen when the source status preceded the message (i.e., self-validation). The present research analyzed two different *processes* by which majority/minority source status could affect persuasion as a function of elaboration when source status information followed rather than preceded message information.

Specifically, on the one hand, under a high-elaboration level an interaction between argument quality and source status was observed. For majority source status participants, those who received the strong arguments had significantly more favorable attitudes toward the proposal than did those who received the weak arguments. However, minority source status participants did not show a significant difference in attitudes if they received the message composed of strong arguments or the message composed of weak arguments. This is consistent with a self-validation explanation according to which source status can influence the extent to which people rely on their positive and negative thoughts presumably generated to a strong or weak message. We propose that the majority source presumably increased (or minority source reduced) thought confidence and as a consequence, we observed an increased (or decreased) argument quality effect on attitudes. Had our source status manipulation preceded the message, the pattern we observed under high elaboration conditions would likely have been attributed to greater processing of the majority versus the minority message. Because our manipulation followed message processing and elaboration was already high, we argue that a more likely explanation is that the majority (relative to the minority) status of the source increased

confidence in the thoughts people already had to the message and caused them to rely on them more. This interpretation would be consistent with prior findings from Horcajo and colleagues (2010), who also showed mediation through confidence on attitude change when source status information followed processing. Thus, taken together with previous research, it can be concluded that elaboration and timing constitute two moderating factors of the self-validation effects in prior attitude change research (Briñol & Petty, 2009).

On the other hand, under a low-elaboration level, majority source status increased persuasion compared to a minority source irrespective of argument quality, presumably through a *peripheral cue* process. This is consistent with previous research on majority/minority influence suggesting that source status can operate as a cue when elaboration is low and source status information is available before the message (e.g., serving as quick heuristic to persuasion or resistance: ''the majority is more likely to be correct''). To our knowledge, the present research is the first to show that majority/minority source status can affect persuasion by acting as a peripheral cue even when source status information is included after a message and elaboration likelihood is relatively low.

In sum, although prior research has shown that the placement or *timing* in which the source information is introduced (i.e., prior to vs after the message) can moderate the effects and underlying processes of source factors such as numerical source status (Horcajo et al., 2010) or source credibility (Tormala et al. 2007), the present research explored empirically a different variable (extent of elaboration) that can moderate the impact of source factors in persuasion when source information follows message processing. Although previous research demonstrated that extent of elaboration can moderate processes of first-order cognition (use of cues vs biasing thinking) when manipulated *prior* to message processing (Martin et al., 2007), it did not provide any evidence for the moderating role of elaboration when source status *follows* the message. Thus the current study reveals that elaboration can moderate other processes (use of cues vs use of thoughts) when introduced after message processing.

Despite the novel contributions of the present research, some questions deserve further attention. First, although the predicted pattern of results for high-elaboration participants was consistent with a self-validation explanation, other possible explanations might be considered. For example, the effects of majority/minority source status on attitudes could be due to participants in the majority source status condition engaging in increased message processing after the message, which would in turn lead to the obtained argument quality effect. This alternative explanation seems implausible for a number of reasons. First, most past research has shown that when amount of thinking is affected by source status it is often

minorities that trigger more extensive discrimination between strong and weak arguments (e.g., Horcajo et al., 2010; Martin & Hewstone, 2008; see Baker & Petty, 1994; Martin & Hewstone, 2003, for exceptions). The message used in the current study was not counter-attitudinal and did not include a negative personal outcome (the specific conditions in which majority status has been found previously to increase message processing), thus, it seems unlikely that majority (vs minority) status resulted in an increase in message processing.

Second, no effect of the majority/minority source status was apparent on the measure of perceived attention. Although this finding represents a null effect, the measure we used has proven sensitive to differences in elaboration in similar studies (e.g., Briñol & Petty, 2003) and proved sensitive to detecting the impact of the elaboration manipulation in this study. Nevertheless, future research should include more complete measures of elaboration and also register cognitive responses. However, given this lack of effect on the current measure of perceived attention, we argue that participants in the majority and minority source status conditions were not likely to differ in their degree of elaboration. Rather, the extent of attention was only a function of the manipulation of elaboration. Finally, as noted before, it is important to highlight again that source status was induced after information processing in the present research. Thus it is unlikely that participants' amount of thinking was affected by the source status manipulation.

Another potential alternative explanation would be that the quality of the arguments led participants to generate expectations about the numerical status of the source. According to this possibility, after receiving strong arguments people will expect the source to be in the majority, whereas after receiving weak arguments people will expect the source to have a minority status. Although plausible, this matching interpretation would predict a pattern of results different to the ones observed in the present study, and would not account of the moderating role of elaboration. For example, this interpretation would predict that participants who received weak arguments from a minority source would show the lowest persuasion. However, participants who received weak arguments showed more persuasion for a minority than a majority status source, consistent with the idea that the minority source reduced reliance on the (negative) thoughts likely generated to the message.

In sum, the present research examined the multiple processes by which source factors can produce persuasion when induced after thinking and this is important for several reasons. First, this research shows that some of the roles that source status plays after a message are the same as played before the message (i.e., peripheral cue processes), but some roles are different (i.e., self-validation). Second, because numerical source status affected attitudes

by two different processes as a function of elaboration, we were able to obtain different persuasion outcomes for the same variable. Thus these results suggest that majority/minority source status can increase or decrease persuasion depending on the underlying process by which they operate when induced after the message.

Furthermore, the ELM holds that the process by which an attitude is formed or changed is consequential for the strength of the attitude (Petty & Cacioppo, 1986). Thus, even if two different processes result in the same extent of persuasion, the consequences of this persuasion can differ. For example, when variables such as source status produce persuasion through low thinking processes (e.g., serving as a peripheral cue) the attitudes formed are less persistent, resistant to change, and predictive of behavior than when the same amount of change is produced by source status via high thinking processes (e.g., validating thoughts; Briñol & Petty, 2009; see also Martin & Hewstone, 2008). Thus understanding the processes by which variables such as source status have their impact is important because it is informative about both the immediate and the long-term consequences of persuasion. Applied to the present research, one could argue that the persuasive effect obtained for the majority source status would likely be more impactful and predictive of behavior when it results from the validation of positive thoughts under high thinking conditions than when it emerges from the operation of a simple heuristic under low thinking conditions.

In addition to the theoretical rationale previously described, the present study has several implications for the potential applicability of these results to real-life situations. For example, regarding the placement of source status information, the introduction of the majority/minority source information (prior to vs after a persuasive proposal) makes sense in natural settings because many life situations often involve thinking about issues before learning the opinions of other people. However there are also relevant situations in which source status information is learned following thinking. For example, following the analysis of a proposal (e.g., advertising, political issue...), another person could make salient whether many or few others agree. In these circumstances the source status information will follow the proposal and, according to the present research, the different effects on judgment could be understood in terms of a self-validation process (under high-elaboration conditions) or a peripheral cue mechanism (under low-elaboration conditions). Therefore people who are familiar with our research on the importance of timing and elaboration could strategically reveal the majority or minority status of source to achieve the better persuasive effects. In fact, although majority source status could generally produce more persuasion, our present study showed that majority source status can decrease persuasion under some circumstances. As shown in the present study this would be the case when majority source status

information is introduced following a message composed by weak arguments and recipients are under high-elaboration conditions.

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## REFERENCES

Baker, S. M., & Petty, R. E. (1994). Majority and minority influence: Source-position imbalance as a determinant of message scrutiny. *Journal of Personality and Social Psychology*, *67*, 5–19.

Briñol, P., & DeMarree, K. G. (2012). *Social metacognition*. New York: Psychology Press.

Briñol, P., & Petty, R. E. (2003). Overt head movements and persuasion: A self-validation analysis. *Journal of Personality and Social Psychology*, *84*, 1123–1139.

Briñol, P., & Petty, R. E. (2009). Persuasion: Insights from the self-validation hypothesis. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 41, pp. 69–118). New York: Elsevier.

Chaiken, S., Liberman, A., & Eagly, A. H. (1989). Heuristic and systematic information processing within and beyond the persuasion context. In J. S. Uleman & J. A. Bargh (Eds.), *Unintended thought: Limits of awareness, intention and thought* (pp. 212–252). New York: Guilford Press.

Crano, W. D., & Chen, X. (1998). The leniency contract and persistence of majority and minority influence. *Journal of Personality and Social Psychology*, *74*, 1437–1450.

Erb, H., Bohner, G., Schmalzle, K., & Rank, S. (1998). Beyond conflict and discrepancy: Cognitive bias in minority and majority influence. *Personality and Social Psychology Bulletin*, *24*, 396–409.

Gross, S., Holtz, R., & Miller, N. (1995). Attitude certainty. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 215–245). Mahwah, NJ: Lawrence Erlbaum Associates Inc.

Horcajo, J., Petty, R. E., & Briñol, P. (2010). The effects of majority versus minority source status on persuasion: A self-validation analysis. *Journal of Personality and Social Psychology*, *99*, 498–512.

Jost, J. T., Kruglanski, A. W., & Nelson, T. O. (1998). Social meta-cognition: An expansionist review. *Personality and Social Psychology Review*, *2*, 137–154.

Kruglanski, A. W., & Mackie, D. M. (1990). Majority and minority influence: A judgmental process analysis. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (Vol. 1, pp. 229–262). New York: John Wiley.

Maass, A., & Clark, R. D. III (1983). Internalization versus compliance: Differential processes underlying minority influence and conformity. *European Journal of Social Psychology*, *13*, 197–215.

Mackie, D. M. (1987). Systematic and nonsystematic processing of majority and minority persuasive communications. *Journal of Personality and Social Psychology*, *53*, 41–52.

Martin, R., & Hewstone, M. (2003). Majority versus minority influence: When, not whether, source status instigates heuristic or systematic processing. *European Journal of Social Psychology*, *33*, 313–330.

Martin, R., & Hewstone, M. (2008). Marjority versus minority influence, message processing, and attitude change: The source-context-elaboration model. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 40, pp. 237–326). San Diego, CA: Academic Press.

Martin, R., Hewstone, M., & Martin, P. Y. (2007). Systematic and heuristic processing of majority- and minority-endorsed messages: The effects of varying outcome relevance and levels of orientation on attitude and message processing. *Personality and Social Psychology Bulletin*, *33*, 43–56.

Moscovici, S. (1980). Toward a theory of conversion behavior. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 13, pp. 209–239). New York: Academic Press.

Mugny, G., & Pérez, J. (1991). *The social psychology of minority influence*. Cambridge, UK: Cambridge University Press.

Petty, R. E., & Briñol, P. (2012). The Elaboration Likelihood Model. In P. A. M. V. A. N. Lange, A. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (Vol. 1, pp. 224–245). London: Sage.

Petty, R. E., Briñol, P., & Tormala, Z. L. (2002). Thought confidence as a determinant of persuasion: The self-validation hypothesis. *Journal of Personality and Social Psychology*, *82*, 722–741.

Petty, R. E., & Cacioppo, J. T. (1979). Issue-involvement can increase or decrease persuasion by enhancing message-relevant cognitive responses. *Journal of Personality and Social Psychology*, *37*, 1915–1926.

Petty, R. E., & Cacioppo, J. T. (1984). The effects of involvement on responses to argument quantity and quality: Central and peripheral routes to persuasion. *Journal of Personality and Social Psychology*, *46*, 69–81.

Petty, R. E., & Cacioppo, J. T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer-Verlag.

Tormala, Z. L., Briñol, P., & Petty, R. E. (2007). Multiple roles for source credibility under high elaboration: It's all in the timing. *Social Cognition*, *25*, 536–552.

Tormala, Z. L., Petty, R. E., & Briñol, P. (2002). Ease of retrieval effects in persuasion: A self-validation analysis. *Personality and Social Psychology Bulletin*, *28*, 1700–1712.

Tormala, Z. L., Petty, R. E., & De Sensi, V. L. (2010). Multiple roles for minority sources in persuasion and resistance. In R. Martin & M. Hewstone (Eds.), *Minority influence and innovation: Antecedents, processes and consequences* (pp. 105–131). London: Psychology Press.

Wood, W., Lundgren, S., Ouellette, J. A., Busceme, S., & Blackstone, T. (1994). Minority influence: A meta-analytic review of social influence processes. *Psychological Bulletin*, *115*, 323–345.