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MAJORITY VERSUS MINORITY SOURCE STATUS AND PERSUASION

Processes of primary and secondary cognition

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A persuasive proposal can be endorsed by a majority or a minority of other people. Initial studies of majority/minority endorsement tended to ask relatively simple questions such as whether majorities or minorities had greater influence (e.g. Asch, 1956; Moscovici, Lage, & Naffrechoux, 1969). Indeed, most of the work carried out to address this significant question revealed as might be intuited, that numerical majorities often exert greater influence than numerical minorities do (e.g. Crano & Seyranian, 2007; De Dreu, 2007; Martin & Hewstone, 2010; Martin, Hewstone, Martin, & Gardikiotis, 2008; Wood, Lundgren, Ouellette, Busceme, & Blackstone, 1994; for general reviews). For example, if people were to learn that 86 per cent (i.e. the majority) of others endorsed a proposal, they would be more likely to agree with it than if told that only 14 per cent (i.e. the minority) endorsed it. However, research has shown that under some circumstances, minority endorsement can also be influential, especially when attitude change occurs on an indirect, latent or private level (Crano & Chen, 1998; Moscovici, 1980, 1985; Mugny & Pérez, 1991).

One important research question posed over the years is whether majorities and minorities bring influence through the same or different persuasion processes (e.g. Maass & Clark, 1983; Moscovici, 1980; Nemeth, 1986). Research conducted to address the underlying psychological processes has revealed that the majority/minority status of a source can have various effects through different processes depending on the motivational and cognitive factors present in the targeted influence recipients (e.g. Horcajo, Briñol, & Petty, 2014; Martin & Hewstone, 2008; Tormala, Petty, & DeSensi, 2010; see also, Kruglanski & Mackie, 1990; Maass & Clark, 1983; Petty & Wegener, 1998).

In accord with contemporary multi-process theories of persuasion such as the elaboration likelihood model (ELM) (Petty & Cacioppo, 1986; see also Petty &

Briñol, 2012, for a recent review) and the heuristic-systematic model (HSM) (Chaiken, Liberman, & Eagly, 1989), persuasion research focuses on the moderation and mediation of attitude change and explains how the same variable (e.g. majority/minority source status) can lead to different outcomes on attitude change in different situations, and how it can produce the same persuasive effects by different processes under different levels of elaboration. Furthermore, even when the persuasive effect is the same in the short term, the underlying process of change can determine the extent to which those changes remain stable over time and guide behaviour). In short, understanding the processes by which a variable such as the numerical status (majority/minority) of the source changes attitudes is essential in order to predict not only *whether*, *when*, and *how* attitudes will change but also to predict whether, when, and how those attitude changes will be consequential (e.g. result in behavioural changes; see Petty, Haugtvedt, & Smith, 1995).

Considerable research has now shown that the majority or minority status of the message source can influence attitudes by fulfilling different *roles* depending on the overall likelihood of elaboration (i.e. the degree of cognitive effort people are able and willing to expend in processing a persuasive communication; Tormala et al., 2010). The psychological processes relevant to the effects of majority/minority source status on persuasion can be organized into a finite set that operates at different points along an elaboration continuum. This process-based approach to the study of majority/minority influence has allowed the specification of (a) the different effects that can occur as a function of the different *processes* responsible for those effects, (b) the *conditions* under which these different processes occur and, moreover, (c) the *consequences* of these processes with regard to the strength of people's attitudes (Martin & Hewstone, 2008).

The present chapter is organized into four sections. First, we begin by reviewing how majority/minority source status can affect attitude change through different psychological processes that emphasize primary cognition. Primary cognition involves thoughts that occur at a direct level and involve people's initial associations of some object with some attribute (e.g. ice cream is tasty). Following a primary thought, people can also generate other thoughts, which occur at a second level and involve reflections on the first-level thoughts (e.g. I am sure that ice cream is tasty). *Metacognition* refers to these second-order thoughts, or thinking about thinking (see Briñol & DeMarree, 2012; Petty, Briñol, Tormala, & Wegener, 2007). In the second part of this chapter, we focus on this secondary form of cognition, describing recent work on majority/minority source status that reveals that source status can influence attitudes by affecting confidence in thoughts (a metacognitive process called *self-validation*, Petty, Briñol, & Tormala, 2002). In the third section, we specify the conditions under which majority/minority source status is more likely to operate through primary or secondary cognitive processes. Finally, the last section outlines some general conclusions and highlights a number of current and future issues relevant to the majority/minority source status research in persuasion.

Numerical status of the source and primary cognition

There are four fundamental ways relevant to primary cognition in which the majority/minority source status can affect attitudes according to the elaboration likelihood model (Petty & Cacioppo, 1986; Petty & Briñol, 2012): (1) by serving as a simple cue; (2) by affecting the extent of information processing (i.e. influencing motivation or ability to think); (3) by affecting the direction of processing (i.e. introducing a bias to the ongoing thinking); and (4) by serving as a piece of substantive evidence (i.e. an argument). Each of these processes tends to operate under different conditions within a continuum of elaboration likelihood. Although each of these roles has been documented for various persuasion variables (e.g. see Petty & Briñol, 2015, for an application to emotional states), we outline how these same roles can explain the impact of majority/minority source status.

Specifically, when elaboration is low (e.g. due to distraction, or low personal relevance), variables such as the numerical status of the source are expected to affect persuasion through mechanisms that require little cognitive effort (e.g. serving as a simple heuristic: 'majorities are right': 'if a majority supports that proposal, it must be true'). Thus, people might simply accept or reject a majority *versus* minority proposal because it is assumed to be valid or invalid (due to the high or low consensus). Consistent with this idea, the majority (vs minority) source has been found to serve as a simple cue to acceptance (vs resistance) and a persuasive proposal when thinking about the message was constrained to be low (e.g. Giner-Sorolla & Chaiken, 1997; for a similar finding on attitudes even in the absence of persuasive argumentation, see Darke, Chaiken, Bohner, Einwiller, Erb, & Hazlewood, 1998; Mackie, 1987).

When elaboration is not constrained by other variables to be high or low, variables such as numerical status of the source can determine the amount of information processing in which people engage. In this intermediate or unconstrained elaboration level, majority/minority source status is postulated to influence *how much* scrutiny of the message people do. Moscovici (1980, 1985) was the first to advance the notion that minority sources can involve greater message-processing than majority sources and, under some circumstances, researchers have provided evidence for this view (e.g. Baker & Petty, 1994; De Dreu & De Vries, 2001; Erb, Bohner, Rank, & Einwiller, 2002; Martin & Hewstone, 2003). For example, Horcajo, Petty and Briñol (2010, Experiment 2) conducted an experiment in which participating university students were first assigned to a majority or a minority source status condition and then received a message about possible changes in the institutional colour that served as the symbol of their institution. The amount of information processing was assessed in this study by varying the quality of the arguments contained within the persuasive message, and by measuring the impact of these arguments on the subsequent thoughts and attitudes (Petty, Wells, & Brock, 1976). The results showed a larger argument-quality effect on attitudes for the minority vs the majority source (see Figure 5.1). The same was true on the

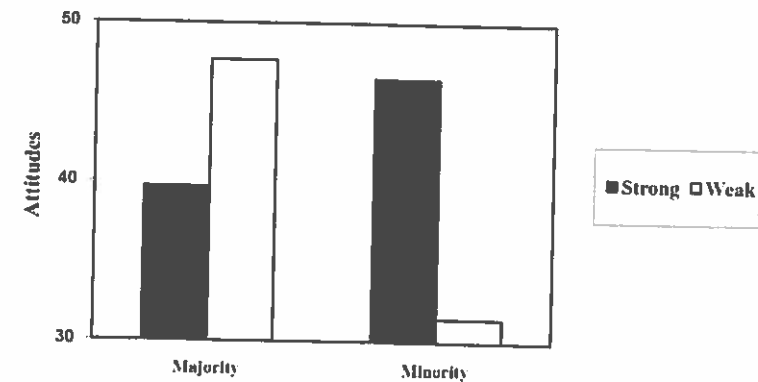


FIGURE 5.1 Attitudes as a function of source status and argument quality

Source: Horcajo et al. (2010, Experiment 2).

attitudes were mediated by the thoughts that participants generated in response to the message. This pattern of results is consistent with the idea that the minority endorsement led to greater message-processing than majority endorsement.

Although minorities tend to increase processing, majority sources have also been found to be associated with more processing than minority sources under some specific circumstances (e.g. Mackie, 1987). Various contextual factors have been identified that determine whether it is majority or minority sources that elicit more thinking, such as whether the position endorsed by a majority or minority source is pro-*versus* counter-attitudinal (e.g. Baker & Petty, 1994), and whether the message proposes a negative personal outcome (e.g. Martin & Hewstone, 2003). Specifically, when the persuasive message was counter-attitudinal or it included a negative personal outcome, the majority source increased message-processing over the minority source. In contrast, when the message was pro-attitudinal or it did not include a negative personal outcome, the minority source increased message-processing. Baker and Petty (1994) speculated that this was because negative messages are more surprising or threatening when they come from a majority than a minority but the opposite is the case for positive messages.¹

Finally, when elaboration is high, the numerical status of the source can play other roles in persuasion settings. One such role is biasing the thoughts people generate in response to persuasive messages. Indeed, much research on majority/minority status of the source has focused on whether majority/minority sources can influence thinking in response to a persuasive message. Most previous studies have shown that when thinking is high, majority sources prompt a positive bias, fostering greater persuasion by increasing the number of positive thoughts generated (e.g. Mackie, 1987), whereas minority sources foster resistance by increasing the number of counter-arguments generated by the message recipients (e.g. Erb

relevant study, for instance, Trost et al. (1992) manipulated the extent of thinking with a personal relevance induction (Petty & Cacioppo, 1979), and found greater evidence of negatively biased processing of messages from minority sources when participants found the message to be high rather than low in personal relevance (for a discussion, see Martin, Hewstone, & Martin, 2007).³

Taken together, previous research on majority/minority status of the source is consistent with the notion that the numerical status of a message source can influence attitudes through different mechanisms depending on message recipients' level of elaboration. One notable examination of this notion was conducted by Martin, Hewstone and Martin (2007) who manipulated the level of elaboration within the same experimental design (low, intermediate and high). In line with the ELM predictions about multiple roles, they 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. an intermediate level of elaboration), source status affected *how much thinking* people did about the message. Specifically, the minority source increased careful processing, as revealed by greater argument-quality effects shown for minority rather than majority sources. Finally, when elaboration was high in this study, 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.⁴

In sum, people can use majority/minority status of the source as valuable information for persuasion, and this effect can occur through processes that require more or less thinking. These different processes can sometimes be associated with different outcomes (more or less persuasion for the majority source depending on whether strong or weak arguments are elaborated). At other times, the same source variable (majority source status) can lead to the same outcome (e.g. more persuasion) by very different underlying processes (e.g. majority source as heuristic or cause of biased thinking). Importantly, even though majority (vs minority) status of the source can sometimes produce the same degree of persuasion through low and high thinking processes, the subsequent consequences are likely to be different in each case (see Martin & Hewstone, 2008; Martin, Hewstone, & Martin, 2010; for a review). As noted, it is essential to understand the extent to which source status can influence attitude change by affecting thinking because of the subsequent consequences associated with the amount of elaboration. Attitudes based on high amounts of thinking tend to be stronger than attitudes based on little thought. That is, attitudes based on high elaboration are more accessible, stable, resistant to counter-messages and predictive of behaviour (see Petty et al., 1995). Thus, considering the amount of thinking underlying attitude change is fundamental because the overall goal of most persuasive attempts is to produce long-term behaviour change.

the source and do not want this to occur, they may adjust their judgements in a direction opposite to the expected bias (*correction processes*; Wegener & Petty, 1997; Wegener, Silva, Petty, & García-Marques, 2012).

Numerical status of the source and secondary cognition

In the first part of this chapter, we described how earlier research on minority versus majority influence showed that the numerical status of the source can influence attitudes by serving as a simple cue, by affecting either the amount or direction of thinking, and hypothetically by serving as an argument. More recently, we have proposed that the majority/minority status of the source can not only influence what or how much people think about attitude objects but can also impact what people think about their own thoughts. As noted, this idea is referred to as the *self-validation hypothesis* (Petty et al., 2002). The key notion is that generating thoughts is not sufficient for these thoughts to have an impact on judgements. Rather, one must also have confidence in the validity of those thoughts. Thinking about the validity of one's thoughts involves thinking about thinking, a form of secondary cognition or metacognition (Briñol & DeMarree, 2012).

A self-validation approach to majority/minority influence proposes that the numerical status of the source can influence message recipients' confidence in their thoughts about the persuasive message. Confidence is a subjective sense of conviction about the validity of one's beliefs, opinions, goals, or whatever mental content is active (e.g. Briñol & Petty, 2009; Gross, Holtz, & Miller, 1995). An early link between source status and confidence can be found in Festinger's (1954) discussion of social comparison theory. Festinger suggested that people evaluate the correctness of their attitudes and beliefs by looking at other people's opinions. Thus, if people are assessing the correctness of an advocated position, they could use the number of other people who endorse the position as an indicator of its validity and see the position as more correct when endorsed by a majority than a minority (see also Asch, 1956).

Horcajo and colleagues (2010) have shown that sources in the numerical majority (vs minority) can operate through a metacognitive process by increasing (vs decreasing) the confidence with which people hold their thoughts about the persuasive message. In the first study illustrating this possibility (Horcajo et al., 2010, Experiment 1), participants received a persuasive message composed of either strong or weak arguments about the organizational conditions of a new company. An example of the gist of a strong argument was that most workers report high satisfaction because of the flexibility of their schedules and the company's investment in training. An example of the gist of a weak argument was that the company used un-recycled paper in order to have a good public image. The strong and weak messages were then attributed to a majority or a

or a minority (14 per cent) of them liked and supported the company. That is, source status was manipulated by attributing the endorsement of the company to a numerical majority or minority of students.

Consistent with the self-validation hypothesis (Petty et al., 2002), it was predicted and found that the majority source increased the confidence with which recipients held their thoughts in response to the message compared with the minority source. As a consequence, the majority source increased the impact of argument quality on attitudes compared with the minority source. That is, when the message contained strong arguments, the confidence induced by the majority source was associated with more persuasion because people relied more on their positive thoughts generated in response to the convincing message. On the other hand, when the message contained weak arguments, the confidence generated by the majority source was associated with less persuasion because people were more reliant on their negative thoughts (counter-arguments) generated in response to the flawed, specious arguments (see Figure 5.2). Importantly, in accord with the self-validation hypothesis, the confidence with which participants held their thoughts mediated the effects of source status on attitudes. To our knowledge, that was the first time in which thought confidence has been found to mediate the majority/minority source effects on judgement, providing a new psychological process by which the majority/minority source can affect attitudes.⁵

It is important to note that an interaction of source status with argument quality in affecting attitudes taken alone could be interpreted as source status affecting the extent of thinking about the message. Thus, the research by Horcajo et al. also addressed the question of when this interaction pattern would be a function of source status affecting the extent of thinking and when it would be a function of self-validation processes. Next, we describe the two moderating conditions about which the most research has been conducted so far.

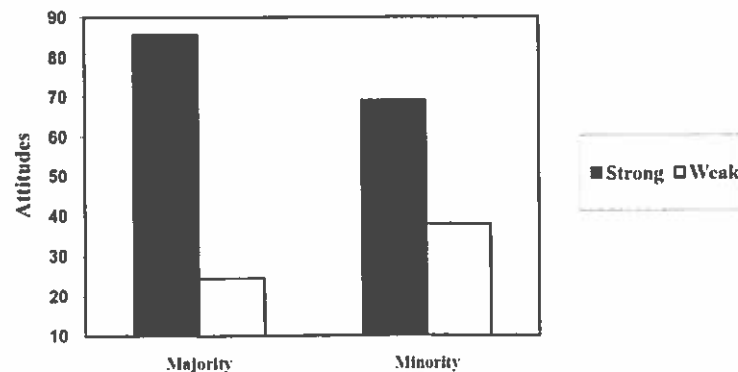


FIGURE 5.2 Attitudes as a function of argument quality and source status

Factors moderating self-validation effects of majority/minority source status

Research about the effects of the majority/minority status of the source on persuasion has identified two limiting conditions on the influence of that source status on attitudes via thought validation: (1) the placement of the source status information before or after the message and (2) the extent of elaboration the message received. Next, we describe the research findings related to these two moderating factors.

Moderation by the placement (or timing) of the majority/minority source induction

In most of the prior research in the majority/minority influence literature, the numerical information about the source has been manipulated *prior to* message receipt (Martin & Hewstone, 2008). Nevertheless, there are a few exceptions. For example, Erb and colleagues (1998) manipulated the source status information *after* message receipt and found that it did not affect the amount, balance or type of thoughts in response to a persuasive message, but rather it produced a pattern of results that is consistent with the self-validation logic. Specifically, Erb et al. (1998, Experiment 2) used a persuasive message containing both strong and weak arguments that promoted a (fictitious) new holiday resort area in Brazil and manipulated the order of presentation of source status (before or after the message) and numerical source endorsement information (representing a small minority of 14 per cent *versus* a large majority of 86 per cent of tourists who had spent a vacation there). In this study, Erb et al. (1998) found that the numerical status of the source biased the elaboration of the mixed message when the source status information *preceded* the message, but did not produce a thought bias when the source status information was presented *after* the message. When the source information followed the message, it had no impact on attitudes. The latter finding is consistent with what would be expected if the majority source increased confidence in both the positive and negative thoughts to the mixed argument message, compared with the minority source.

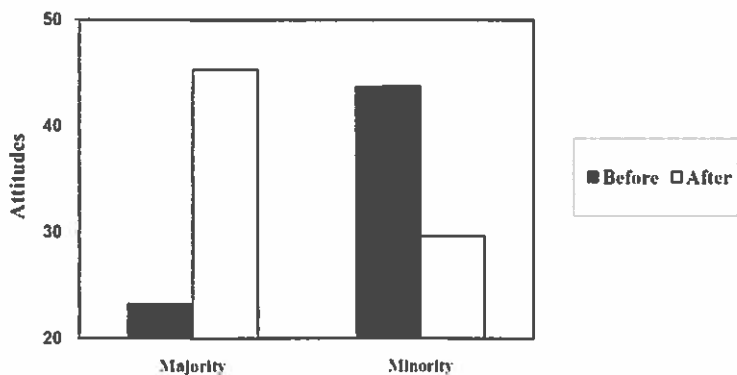
Although the Erb et al. study is suggestive, in order to directly examine the role of timing on the effects of source status, Horcajo et al. (2010, Experiment 3) varied whether the numerical information about the source was introduced before or after thinking about a persuasive message that contained strong (rather than mixed) arguments about the organizational conditions of a new company. Source status was manipulated by attributing the endorsement of the company to a source representing a numerical minority or majority of students (i.e. 14 per cent *versus* 86 per cent of their fellow students supported the company). This study revealed that sources in the numerical majority (vs minority) can increase (or decrease) persuasion to strong arguments depending on whether it is introduced before or after the message.

the minority source), consistent with the idea that the majority source can validate positive thoughts in response to strong arguments. In contrast, when source status was introduced preceding the message, the majority decreased persuasion (compared with the minority source), consonant with the idea that the majority source can reduce processing of strong arguments 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) (see Figure 5.3).

Moderation by recipient's amount of thinking

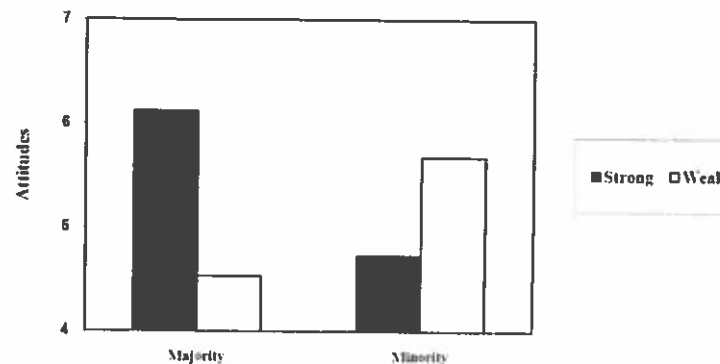
Although the initial research on self-validation conducted by Horcajo et al. (2010) provided clear support for the persuasive effects of majority/minority source status via a self-validation process, when source status information was induced after message-processing, it did not examine whether self-validation is invariably the mechanism by which majority/minority source status affects persuasion when introduced after a message or whether there are other possibilities. Notably, meta-cognitive processes such as self-validation should occur primarily 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 the primary level of cognition, but also to think and care about their own thoughts.

Horcajo and colleagues (2014) conducted another experiment in which they first manipulated the level of elaboration (low vs high) using a classic manipulation of motivation to process message information (e.g. Petty & Cacioppo, 1984). Specifically, 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 colour. In order to manipulate the motivation to think about the message, some participants were told that the proposal involved

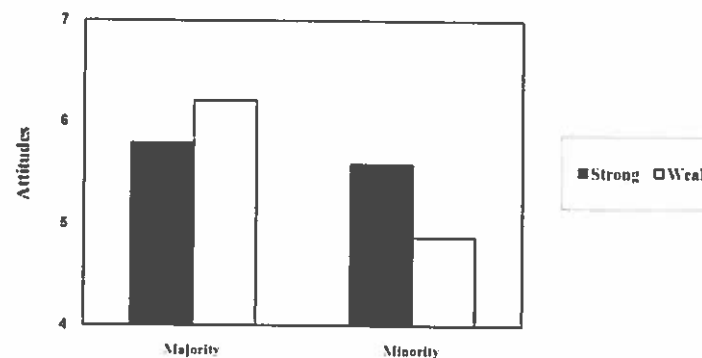


their university (i.e. high personal relevance) whereas others were told it involved another university (i.e. low personal relevance). Then, participants were assigned to receive a persuasive message composed of strong or weak arguments on a relatively novel topic (i.e. in favour of using the colour green as the colour of the university). An example of the gist of a strong argument was that research found that the performance and satisfaction of everybody would improve if green was the colour adopted by the university. An example of the gist of a weak argument was that green is the colour of essential elements relevant to traditional education such as chalk boards. After participants read the persuasive message, source status was manipulated by attributing the message to a source in the numerical majority

HIGH ELABORATION



LOW ELABORATION



(86 per cent) or minority (14 per cent). Finally, participants reported their attitudes towards the proposal.

In this study, the self-validation findings obtained for the majority (vs minority) source status in previous research were restricted to high elaboration conditions. That is, only under high elaboration (high personal relevance) conditions, did the majority source status increase the argument-quality effect on attitudes compared with the minority source (see Figure 5.4, top panel). This finding is consistent with the self-validation hypothesis according to which source status can influence the extent to which people rely on their positive or negative thoughts generated by the strong or weak message.

In contrast, under low-elaboration conditions, source status was predicted and found to influence attitudes by serving as a peripheral cue. That is, the majority source increased persuasion compared with the minority source irrespective of argument quality (see Figure 5.4, bottom panel). As noted before, simple cue effects for majority/minority sources have been observed under low thinking conditions when source status has preceded a message (e.g. Mackie, 1987; Martin et al., 2007), compatible with much of the previous research on the operation of simple cues processes (e.g. Petty & Cacioppo, 1984; Tormala, Petty, Briñol, 2002). However, no previous research had examined whether majority/minority status of the source 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 when thinking and elaboration are low. In addition, this is the first study in the majority/minority influence literature in which both self-validation and simple cue processes have been shown to affect persuasion in the same study (see Horcajo et al., 2014).

However, it remains unclear what the specific psychological mechanism is by which majority (vs minority) source status increases (vs decreases) persuasion under low-elaboration conditions. Specifically, the present research did not address whether the main effect of majority/minority status of the source on attitudes under low elaboration (i.e. the majority source status participants showing more favourable attitudes than the minority source status participants) was due to a simple association process as in classical conditioning, or whether it was due to retrieval of a learned heuristic (e.g. 'the majority is more likely to be correct'), or whether the participants validated the perception of the position advocated by the majority source. Typically, when source status was manipulated preceding the message, similar findings have been explained as majority/minority sources invoking a simple heuristic 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. Giner-Sorolla & Chaiken, 1997; Darke et al. 1998; Mackie 1987). More recently, Horcajo et al.

between source status and the message recipients' confidence. Thus, whether the position of the message (in favour of, or against) is clearly salient and perceived by recipients under a low-elaboration level, the majority source information received after perceiving the direction of the message could validate also the perception of that position without the need for a detailed appraisal of the majority source's arguments (compared with the minority source). Whichever explanation proves correct, however, it seems unlikely that the process by which majority/minority source status affected attitudes under low-elaboration conditions had little to do with source status influencing the thoughts elicited by the persuasive message. Future research should examine the specific psychological mechanism responsible for the effects found under low-elaboration conditions.

Conclusions and future research

In this chapter, we have reviewed the different ways in which the majority/minority status of the source can affect persuasion through a variety of mechanisms relevant to primary and secondary cognition. As is the case with other source variables, when the majority/minority status of the source information is provided *before* message-processing, it has been found to affect attitude change by: (1) serving as a peripheral cue to persuasion or resistance when recipients' level of elaboration was *low* (with the majority source increasing persuasion); (2) increasing or decreasing message-processing when thinking was not constrained by other variables to be high or low (i.e. under *intermediate*-elaboration level, with either the majority or minority source enhancing processing, depending on the situational and individual conditions); and (3) biasing message-processing when thinking was *high* (with the majority source increasing persuasion by increasing the likelihood of positive thoughts).

As described throughout this chapter, our recent research has shown that when the majority/minority status of the source information was included *after* message-processing was completed, source status can: (1) serve as a peripheral cue when elaboration is *low* (with the majority source increasing persuasion), and (2) validate a person's own thoughts when elaboration is *high* (with the majority source increasing thought confidence and, as a consequence, argument-quality effects).

As noted, persuasion processes influence not only attitude change but also attitude strength (Petty & Cacioppo, 1986; Petty & Krosnick, 1995; Petty & Wegener, 1998). Attitudes that are changed as a result of considerable mental effort tend to be stronger than those changed with little thought and thus are more persistent, resistant to attacks, and predictive of behaviour than attitudes that are changed by processes invoking little mental effort in assessing the central merits of the object (e.g. Martin, Hewstone, & Martin, 2003; Martin, Hewstone, & Martin, 2008; Martin, Martin, Smith, & Hewstone, 2007). (See Martin & Hewstone, 2008; Martin et al., 2010; for an attitude strength analysis in the majority/minority-

only the immediate but also the long-term consequences of persuasion. Applied to the research on the effects of the majority/minority status of the source on persuasion, one could argue that the persuasive effect obtained for the majority source would likely be more impactful and predictive of behaviour 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 line with this assumption, future research should explore the consequences for attitude strength of the processes analysed in the present chapter, especially the processes operating when the majority/minority source information was included *after* message-processing.

Also, future research should specify more precisely whether, and when, source status affects attitude change through normative or informative influence. Although not emphasized in this review, according to the self-validation framework, two broad kinds of validation are possible (Petty, Briñol, & DeMarree, 2007; Wagner, Briñol, & Petty, 2012). One kind of validation, called *cognitive validation*, refers to using one's thoughts because the thoughts are seen as accurate or correct rather than inaccurate. A second, and less-studied type of validation, called *affective validation*, refers to using one's thoughts because people feel good about them or like them (Briñol, Petty, & Barden, 2007; see also Huntsinger & Clore, 2012). Applying this distinction to source numerical status, one possible explanation for the greater use of mental contents when people receive a message from a majority source is that the need to fit with the group leads people to like their thoughts and rely on them more (i.e. affective validation through normative influence). However, because majority source status is also associated with a confidence appraisal based on informational influence, whereas a minority source invokes relatively more doubt, it is also possible that majority endorsement led people to rely on their mental contents more than minority endorsement because people have more confidence in the accuracy of their thoughts (i.e. cognitive validation through informational influence). The research on self-validation described in this chapter does not allow these possibilities to be disentangled because the two forms of influence work in the same direction (i.e. both favour validation by majorities). Thus, whether a majority source invokes an appraisal of liking or confidence, or whether a minority source is appraised as disliking or doubtful, the effect is the same – the majority would lead to greater reliance on thoughts than the minority. As has been the case with other variables (Petty & Briñol, 2015), future research in this domain is needed to shed more light on these two dimensions as bases for majority/minority source status validation, and to specify the conditions in which affective vs cognitive validation is more likely to operate.

Future research should also consider the numerical status of recipients of persuasion. Although minority influence is a phenomenon that traditionally has been studied as a source variable, it could also be subject to research as a recipient variable – as recently illustrated by Morrison and Wheeler (2010; Morrison, 2011). As

power (Briñol, Petty, Valle, Rucker, & Becerra, 2007), numerical status can be conceptualized as both a source and a recipient variable, opening the possibility of studying source–recipient integrations in a more dynamic way (e.g. considering the degree of matching vs mismatching in numerical status, such as when a person who claims to hold a majority opinion on an issue gives a message to a person who also believes he or she holds a majority opinion). Furthermore, although this can be viewed as a 'matching' situation, different effects could emerge depending on whether the position espoused by the source matches the recipient or not. In addition, future studies could benefit from studying not only current numerical status, but also expected, potential numerical status. Indeed, the persuasive effects of majorities might not only depend on their current level of support but also on the perceptions of stability and future change associated with that social support (Prislin et al., 2011; Prislin & Christensen, 2009).

In closing, one might wonder about the applicability of the results described in this chapter to real-life situations. In particular, one might wonder whether there are relevant situations in which majority/minority source status information is learned following thinking. Indeed, some real-life situations might involve thinking about issues before learning the opinions of other people. For example, following a relatively cold analysis of the situation, another person could make a comment on the issue and people could learn what a majority or a minority of others think. In these circumstances, for example, the salience of majority or minority source status will follow thought generation and, according to the present research, its effect on judgement can be understood in terms of self-validation processes if thinking is high. Of course, would-be persuaders who are familiar with our research on the importance of timing could strategically reveal the majority or the minority sources of a proposal to achieve the maximum persuasive effect. The external validity of research depends not only on what naturally happens in the real world, but on what could be made to happen (Mook, 1983).

Notes

- 1 The extent of processing of a message advocated by a majority or a minority source can not only be a function of contextual factors, but also a function of individual difference factors such as uncertainty orientation (Shuper & Sorrentino, 2004).
- 2 Majority/minority status of the source can also affect dimensions of thinking other than direction such as convergent/divergent, creative and novel thinking (e.g. Butera, Mugny, Legrenzi, & Pérez, 1996; Kenworthy, Hewstone, Levine, Martin, & Willis, 2008; Mucchifaina & Pagliaro, 2008; Nemeth, 1986, 1995; Smith, 2008; see Martin & Hewstone, 2008, for a review).
- 3 In accord with the ELM, when elaboration is high, source status could also be treated as an argument – a piece of information relevant to determining the merits of the object or issue – and affect persuasion accordingly. For example, if a majority of professional models advocate for the benefits of a cosmetic product, then this majority source status is likely to

of people might serve as evidence of the exclusivity and uniqueness of the product, and thereby serve as a persuasive argument in favour of the product for some individuals. In this case, if the product was liked by a majority, however, this would not be good evidence for the exclusivity of the product. To our knowledge, this psychological process leading to attitude change remains unexplored. Thus, future research should analyse this mechanism in majority/minority influence settings.

- 4 When thinking is high, as noted before, other studies have shown that source status can bias the direction of the thoughts generated, with majority sources being associated with a reduction in counter-arguing compared to minority sources (e.g. Erb et al., 1998). Notably, persuasion work suggests that biased processing effects are most likely to occur when the messages presented are somewhat ambiguous rather than clearly strong or weak (Chaiken & Maheswaran, 1994), and the use of clearly strong and weak arguments may have hindered obtaining biased processing effects in the Martin et al. study.
- 5 Although the argument quality manipulation (i.e. strong versus weak arguments) has been generally used to identify whether message processing has occurred (see Petty & Cacioppo, 1986), it can also be used for the purpose of making positive or negative thoughts, which can be validated or invalidated, salient. Enhancing thought confidence should increase the argument-quality effect on attitudes because people have confidence in and use their positive or negative thoughts, whereas reducing thought confidence should decrease the argument-quality effect on attitudes because people come to doubt and therefore discard their positive or negative thoughts (Petty et al., 2002).

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