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CHAPTER 5

A Multiprocess Approach to Social Influence

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People try to persuade others and are also the targets of influence in both professional and personal contexts. Given that persuasion is present in nearly every human interaction, people need to know how persuasion works. Indeed, most people have learned something about persuasion strategies thorough trial and error. Practitioners, like lawyers, politicians, and salespeople, have also devoted an incredible amount of time and effort to understanding persuasion and learning what they can do to be more influential.

Building on this intuitive knowledge and his own systematic observation of persuasion in the real world, Robert Cialdini (2001) has argued that six key factors guide most social influence attempts: scarcity, authority, social proof, liking, commitment, and reciprocity. In his best-selling book, *Influence*, supported by a series of compelling experiments reported in some of psychology's most prestigious journals, Cialdini has pioneered the idea that because of the buzzing world of stimuli and confusion in which we live today, many people respond in an automatic way to influence attempts based on these core principles. For example, people might go along with an authority figure without much thinking because experts are presumed to be correct (e.g., Chaiken, 1980), or they might become more attracted to a restaurant if the parking lot is full rather than empty, taking the apparent popularity of the place as social proof that it must be good. We do not dispute the value of these important heuristics or their operation. Indeed, Cialdini has done a remarkable job of synthesizing the accumulated wisdom on persuasion into just six core principles. We also agree that people often

do not have the time or mental resources to think about every persuasive appeal that passes by them each day or every decision they must make. As a result, everybody can fall prey to simple decision rules or triggers that can operate in a fairly automatic manner—just as Cialdini contends.

However, our key point is that the core persuasion variables identified by Cialdini (along with many other ones) do not *always* operate in a mindless way. Thus, influence professionals and laypersons alike should not lose sight of the fact that there is not just one automatic route to influence. As an opening example, consider one of the core Cialdini heuristics—scarcity. At one level, the law of supply and demand—where the scarcity of a commodity makes it more valuable—is the driving force behind virtually all economic behavior (Alchian & Allen, 1967). What core principle could be more basic? In accord with the scarcity principle, social psychological studies on commodity theory (Brock, 1968) have demonstrated that whether people are evaluating cookies (e.g., Worchel, Lee, & Adewole, 1975) or verbal self-disclosures from others (Petty & Mirels, 1981), greater scarcity is often associated with more value (see Lynn, 1991, for a review).

In the absence of much thinking, merely suggesting scarcity likely serves as a simple cue to value that can be invoked without much thinking. However, available research also supports the idea that scarcity does not always serve as a simple positive cue. First, different people can impart different meaning to scarce objects, such as when females value scarce self-disclosures from same sex partners and males do not (Petty & Mirels, 1981). Furthermore, scarcity does not always directly link to perceived value, but can first affect a psychological process that then results in an evaluation. For example, some research has shown that making a persuasive message seem more scarce can increase the extent to which it is processed carefully rather than how favorably it is perceived. Consider a study by Brannon and Brock (2001) in which customers who were ordering at a fast-food drive-through location heard either a strong or a weak appeal to try a new dessert paired with high scarcity ("a special offer for today only") or low scarcity ("available all year") information. When the appeal was a strong one, the scarcity information led to an increase in compliance with the request to try the new product, consistent with the scarcity-leads-to-value hypothesis. However, when scarcity information was paired with a weak appeal, the opposite occurred: Scarcity led to a *reduction* in compliance. This interaction of scarcity and argument quality suggests that scarcity produced enhanced thinking about the content of the appeal, leading to increased acceptance when the appeal was strong but increased rejection when the appeal was weak (see Petty & Cacioppo, 1986).

Our key argument in this chapter is that the six classic influence variables identified by Cialdini do not always operate in a simple heuristic manner.

Rather, in accord with contemporary multiprocess theories of influence, such as the *elaboration likelihood model* (ELM; Petty & Cacioppo, 1986) and the *heuristic-systematic model* (Chaiken, Liberman, & Eagly, 1989), variables such as scarcity affect judgments in different ways depending on how motivated and able people are to think about the appeal or request. When motivation or ability to think are low, the variables identified by Cialdini are most likely to operate as simple heuristics. But other roles are possible as motivation or ability to think are increased. After briefly describing this "multiple roles" notion, we will use it to illustrate how it works for two of the core influence variables identified by Cialdini: authority and social proof. Our review focuses on studies of persuasion—research in which the goal is to change someone's mind. We focus on changes in attitudes (people's general evaluations of people, objects, and issues) because attitudes serve a key mediational role in behavior change (i.e., attitude change often mediates the impact of some influence treatment on behavioral compliance).

MULTIPLE ROLES FOR VARIABLES

A core idea from multiprocess theories of influence, such as the ELM is that how a variable works to produce influence depends on where a person falls along an elaboration continuum (see Petty & Briñol, 2012; Petty & Cacioppo, 1986; Petty & Wegener, 1999, for reviews). That is, how a variable works depends on whether the likelihood of thinking is relatively high, low, or unconstrained (i.e., not predetermined by other variables, such as the presence of distraction). Numerous variables determine where the person falls along this continuum. For example, if a message is high in its personal relevance, the person typically enjoys thinking, few distractions are present, and much time is available for deliberation, then the likelihood of thinking is high. But, if a message is low in personal relevance, the person typically doesn't enjoy thinking, many distractions are present, or little time is available for deliberation, thinking is likely to be low. Of course, in many situations, these variables are at some moderate level (e.g., the relevance might be uncertain, distractions might be present but minimal). In such situations, people would be somewhere in the middle of the elaboration continuum.

The importance of this continuum in the ELM is that it determines, at least in part, how a particular variable, such as scarcity, will produce its influence effect. When the likelihood of thinking is low, the variable is assumed to act as a simple cue, producing an effect on evaluation consistent with its valence (scarcity implies value). This mechanism is the one

highlighted by Cialdini. However, when the elaboration likelihood is very high, the same variable can affect influence in a different way. Under high-elaboration conditions, a variable is evaluated as an argument. That is, a person can deliberatively assess whether the scarcity of a product is a good reason to buy it. And, as we describe in more detail shortly, under high thinking conditions, variables can also bias thinking or affect what people think about their own thoughts. Which of these high elaboration processes occurs depends on other factors, such as the relevance of the variable to assessing merit and whether the variable is introduced before or after message processing has been completed. Finally, if thinking is not preset by other variables to be especially high or low, then variables tend to influence how much thinking occurs. For example, as we just noted, people might process information about an item more as its scarcity increases.

The ELM holds that the underlying process by which a variable produces persuasion is important to understand for two reasons. First, the outcome of persuasion can change depending on the mechanism by which the variable operates. Equally important, however, is the finding that there are different long-term outcomes that occur depending on the process. Most importantly, when a variable (e.g., scarcity, liking), produces persuasion by a relatively low-effort heuristic process, that influence is mostly of the moment. That is, the impact occurs only while the heuristic is in mind (e.g., "I'll go along with the likable source right now"), but in the next day or week, the influence is likely to be gone. However, if the same variable produces attitude change because of a higher-effort cognitive process (e.g., liking for the source gets the person to pay attention to and process the strong arguments presented), the influence will likely be more long-lasting, resistant to change, and influential in guiding behavior over an extended period of time. The reason for this is that thoughtfully changed attitudes tend to be more accessible and held with greater certainty (see Petty, Haugtvedt, & Smith, 1995, for a review).

AUTHORITY

Now that we have briefly reviewed the idea that any variable can influence people in multiple ways in different situations, we turn to two of the most studied influence variables—authority and social proof—and describe the multiple processes by which they can work. Although the ability of authorities to influence us can stem from multiple factors, we focus on source credibility because that is where the bulk of research lies.[1]

One determinant of a person's authority is his or her reputation for having extensive knowledge, expertise, and/or honesty, and much research

has been devoted to these individual source factors in persuasion. Although there is a tendency to think that credible sources are likely to have just one effect (i.e., increasing persuasion by invoking an automatic heuristic, such as "if an expert says it, it must be true"), in this section, we briefly review research showing that source credibility can produce various effects depending on the circumstances. This means that source credibility can sometimes be associated with increased persuasive impact, but at other times, as was the case for scarcity, credibility can be associated with decreased influence.

According to the ELM, source credibility should serve as a simple cue primarily when people are not engaged in much thinking about the issue. In one study, for example, college students were more persuaded by an expert than a nonexpert source regardless of the quality of the arguments presented, but this simple cue effect only occurred when the issue was presented as very low in personal relevance (Petty, Cacioppo, & Goldman, 1981). When people know the message is irrelevant to them, it is not very adaptive for people to expend their limited cognitive resources to scrutinize the message carefully. Sometimes, however, people are unsure whether the message warrants or needs scrutiny and, in such cases, they can use the credibility of the message source as an indication of whether processing is worthwhile. Research suggests that when the authority of the source is based on expertise, people are more likely to think about the message from a knowledgeable source than from one that lacks knowledge (e.g., Petty, Cacioppo, & Heesacker, 1981). This makes sense as a knowledgeable source provides potentially useful information. Interestingly, if high credibility leads people to think more about weak arguments, then credibility will be associated with reduced persuasion, the opposite of the effect produced when credibility serves as a simple heuristic.[2]

Sometimes, people already know that they want to scrutinize the message, and they are able to do so. In such situations, the credibility of the source can bias the thoughts that come to mind. In particular, if the message is at least somewhat ambiguous rather than clearly strong or weak, the credibility of the source can be used to disambiguate the arguments presented (see also Asch, 1946). This means that people will generate more favorable interpretations of the arguments when the source is highly credible than when the source lacks credibility, leading to an overall increase in persuasion to a credible source but by a thoughtful rather than a heuristic mechanism (see Chaiken & Maheswaran, 1994).[3]

Recently, Briñol, Petty, and Tormala (2004) have argued that source credibility can not only influence how much people think or whether those thoughts are positive or negative (primary cognition), but it can also affect the confidence people have in their thoughts (secondary cognition). *Primary thoughts* are those that occur at a direct level of cognition and

involve an initial association of some object with an attribute or feeling (e.g., "this proposal is stupid"). Following a primary thought, people can also generate other thoughts that occur at a second level and that involve reflections on the first-level thoughts ("am I sure that my thought that the proposal is stupid is correct?"). *Meta-cognition* refers to these second-order thoughts, or our thoughts about our thoughts or thought processes (Petty, Briñol, Tormala, & Wegener, 2007). Source credibility can influence attitude change by affecting thought confidence, a process we refer to as the *self-validation* mechanism of persuasion (Petty, Briñol, & Tormala, 2002).

This hypothesis as applied to source credibility relies on the rather obvious assumption that source credibility can influence the perceived validity of the information in a persuasive proposal (e.g., Kaufman, Stasson, & Hart, 1999). More uniquely, the self-validation proposal is that, when a person has already thought about the information in a message and then discovers that it came from a high- or low-credibility source, the person's own thoughts are either validated or invalidated by this news. For example, if, after thinking about a message, a person learns that the source is highly credible, the person could reason, "because the message information is presumably valid, my thoughts in response to this message are presumably valid as well." However, if the source is very low in credibility, because the information in the message might be invalid, one's thoughts about the message should not be trusted either.

In one study examining the self-validation possibility for source credibility, Tormala, Briñol, and Petty (2006) predicted and found that informing people that a message they had already processed came from a high- rather than a low-credibility source led to either more or less persuasion depending on the nature of people's thoughts in response to the message. In two experiments, participants were presented with either a strong or a weak persuasive message promoting *Confrin*, a new pain relief product, and then information about the source was revealed (i.e., the message came either from a federal agency that conducts research on medical products or from a class report written by a 14-year-old student). When the message was strong, revealing that the source was high in credibility led to more favorable attitudes than did the low-credibility source because of greater reliance on the positive thoughts generated. However, when the message was weak and participants generated mostly unfavorable thoughts, the effect of credibility was completely reversed. That is, high source credibility produced less favorable attitudes than did low source credibility because participants exposed to the more credible source had more confidence in their unfavorable thoughts to the weak message and relied on them more.

In a study looking at multiple roles for source credibility, Tormala, Briñol, and Petty (2007) varied the placement of the source information and

demonstrated that source credibility affected thought confidence only when the source information followed the persuasive message. When source information preceded the message, it biased the generation of thoughts, consistent with past research (Chaiken & Maheswaran, 1994). This study demonstrates that credibility can have an impact through high thought mechanisms, although the specific mechanism operating was different depending on the placement of the source information. In real life, we can often control when information about the source is revealed. For example, an advertisement can reveal a famous endorser before or after the arguments are presented or we, as individuals, can decide to strategically let people know of our expertise before or after we present our arguments, thereby affecting the process of persuasion.

SOCIAL PROOF OR CONSENSUS

We have discussed the scarcity principle briefly and the authority principle in more detail. And we have argued that each of these can operate in multiple ways in different situations. We now turn to a third principle, often referred to as *social proof* or *consensus*. It is a well-established fact that people frequently use the actions and opinions of others, particularly similar others, as a standard of comparison against which to evaluate the correctness of their own actions (Festinger, 1954). As a consequence of this, groups can exert influence on individuals' attitudes because other people provide an *informational* standard of comparison for evaluating the validity of our own judgments and because they provide social *norms* through which we can gain or maintain group acceptance.

Thus, both informational and normative motives are involved in group influence and can sometime produce a knee-jerk reaction to agree or go along with the group majority (e.g., Cialdini & Trost, 1998; Wood, Lundgren, Quellette, Busceme, & Blackstone, 1994). More surprising, however, is the finding that people sometimes show more agreement when a minority rather than a majority advocates something (e.g., Crano & Chen, 1998; Moscovici, 1980; Mugny & Perez, 1991). To address these different outcomes, we present evidence that an implied consensus can not only influence persuasion by invoking a low-effort heuristic process when people are not motivated or able to think much (as emphasized by Cialdini), but can also operate in other ways when the likelihood of thinking is higher.

As just noted, the available research suggests that endorsement from a numerical majority often produces greater influence than a numerical minority, although sometimes minorities can be more effective. Several of the mechanisms we have already mentioned with respect to scarcity and

authority have also been shown to operate for majority versus minority endorsement. Thus, advocacy of a position by a numerical majority (vs. minority) has led to enhanced attitude change by a low-effort acceptance process (majority as a positive cue to validity) when thinking was likely to be low, and by a more thoughtful but positively biased processing mechanism under high thinking conditions (i.e., more favorable thoughts about the message when advocated by a majority).

In one study, for instance, Martin, Hewstone, and Martin (2007) manipulated the extent of thinking and found that when either motivational or cognitive factors encouraged minimal thinking, there was heuristic acceptance of the majority position without detailed message processing. When thinking was high, however, source status biased the thoughts generated. Majority sources tend to produce a positive bias, fostering more favorable thoughts and greater persuasion (see also Mackie, 1987), whereas minority sources tend to foster resistance by negatively biasing message recipients' thoughts (see also Erb, Bohner, Schmalzle, & Rank, 1998). In research in which thinking was not constrained by other variables to be high or low, majority versus minority endorsement has been shown to influence attitude change by influencing the amount of thinking that occurs. When majority versus minority source status affects the extent of processing, it interacts with the quality of the arguments produced to influence attitudes (e.g., Baker & Petty, 1994; for reviews, see Martin & Hewstone, 2008; Tormala, Petty, & DeSensi, 2010).

In addition to these roles, majority versus minority endorsement has also been shown to affect the confidence in which people hold their thoughts in response to a persuasive message. As with source authority, this mechanism has operated when the likelihood of thinking is high, and the extent of endorsement by others is discovered *after* the message processing was completed. In one study (Horcajo, Petty, & Briñol, 2010), participants were presented with a message introducing a new company. The message was composed of either strong or weak arguments about the firm. The gist of one strong argument in favor of the company was that workers report high satisfaction with the company because of the flexibility in the work schedules allowed. In contrast, the gist of one weak argument in favor of the firm was that they used recycled paper in one of the departments during an entire year. After reading and thinking about this information, participants listed their thoughts in response to the company. The strong message led to mostly favorable thoughts, whereas the weak message led to mostly unfavorable thoughts, as intended. Next, it was revealed whether the vast majority (88%) or a mere minority (18%) of the message recipients' fellow students supported the company (see Baker & Petty, 1994).

Consistent with the self-validation hypothesis, Horcajo et al. (2010) predicted and found that the majority or minority status of the endorsement influenced the confidence in which participants held their thoughts about

the company. Specifically, participants had higher thought confidence when the company was endorsed by a majority rather than a minority. As a consequence, majority (vs. minority) endorsement increased reliance on thoughts and thus enhanced the argument quality effect on attitudes. This means that when the message arguments were strong, persuasion was enhanced by majority endorsement; but when the arguments were weak, persuasion was reduced by majority endorsement.[4] As is the case with source authority, one can be strategic in when to reveal the extent of endorsement of a proposal.

OTHER HEURISTICS

We have argued that variables such as scarcity, authority, and social consensus can operate in multiple ways in different situations. We also believe that multiple mechanisms could be involved in the remaining persuasion heuristics. For example, consider the principle of liking. As was the case for the other principles we discussed, the dominant understanding of why liking works seems to be as a fairly automatic heuristic. However, our argument, which should be familiar by now, is that, depending on the message recipient's motivation and ability to think, source factors such as liking or attractiveness can influence persuasion in multiple ways: by serving as a simple cue, biasing the thoughts message recipients have, determining the amount of information processing that occurs, serving as a piece of evidence relevant to the central merits of the issue, or affecting thought confidence.

For example, when the issue is an important one, people would be expected to process the attractiveness of the message source as an argument, so it only would have a positive impact when it is relevant to the issue under consideration (e.g., an advertisement for a beauty product, but not for a bank). However, when people are not thinking much, attractiveness has the same positive impact as a simple cue regardless of its relevance (Petty & Cacioppo, 1983). Of course, source attractiveness, like other variables, can influence not only how we think about different requests, but also how we think about our own thoughts. Thus, people would likely be more pleased with their thoughts when they learn that they were presented by a likable rather than an unlikable source (see Briñol & Petty, 2009b).

CONCLUSION

Although we have not reviewed all six of the Cialdini heuristics in detail, we focused on those for which the most relevant research has been conducted. For authority in particular, and for social consensus, scarcity, and liking to a lesser extent, relevant research indicates that a low-effort

heuristic process is not the only way in which these variables operate. We believe that similar analyses could be made for the remaining heuristics, commitment and reciprocity.

By examining the psychological processes responsible for attitude change, researchers and practitioners can understand and predict further changes in behavior and maximize the chances of designing effective field interventions. Furthermore, by considering the difference between processes of primary and secondary cognition, our understanding of the principles of influence can be advanced. The self-validation research reviewed has shown that this meta-cognitive mechanism can account for some already established persuasion outcomes (e.g., more persuasion with high- rather than low-authority sources), but by a completely different process than postulated previously. Moreover, we have also been able to obtain findings opposite to those typically observed (e.g., when thoughts are mostly unfavorable, persuasion is reduced when people learn that their thoughts were in response to a high- rather than a low-authority source). We hope that our brief review serves as a reminder of both the complexity and the orderliness of the influence process. Although the influence variables identified by Cialdini are extremely pervasive and important, they do not always operate in the same manner.

ENDNOTES

[1] Authority can also stem from the power of the source. Much prior research has emphasized how source power produces *compliance* rather than internalized attitude change (e.g., Kelman, 1958) by a simple low-effort process, but more recent research documents that power can produce persuasion in more thoughtful ways as well (see Briñol & Petty, 2009a, for a review).

[2] If the knowledge of a source is kept high, but the trustworthiness of the source is varied, then people tend to process a message more if the veracity of the source is in doubt (Priester & Petty, 1995). The advocated position of a source that is highly knowledgeable and trustworthy can easily be accepted without much scrutiny.

[3] Importantly, other research has shown that if people come to believe that their thoughts have been biased by the source, they can adjust their judgments in a direction opposite to the perceived biasing impact (i.e., they engage in correction processes; Petty, Wegener, & White, 1998; Wegener & Petty, 1995).

[4] In virtually all of the prior studies manipulating source status and argument quality, the manipulation of source status has *preceded* presentation of the persuasive message. As explained earlier for source credibility, variables can affect the amount of information processing that takes place, as long as it is not already constrained to be high or low by other variables. In contrast, in the study just described, the status of the source was introduced when processing of the message proposal was already done, and operated through thought confidence. In a study in which the placement of the source status was manipulated, it affected the extent of thinking about the message when it came beforehand but affected thought confidence when it followed the message (Horcajo et al., 2010, Experiment 3).