21

The elaboration likelihood model

Understanding consumer attitude change

Jacob Teeny, Pablo Briñol and Richard E. Petty

From billboards to magazine ads to television commercials, most instances of marketing are an attempt to persuade consumers to have a more favourable attitude towards a product, brand, company or service and ultimately influence purchase decision. Attitudes, as used in this chapter and throughout the literature, are summary evaluations indicating what people like and dislike. Although the end goal of a marketing campaign is undoubtedly to motivate behaviour or consumption of a product, a good first step is to persuade the consumer to have a favourable attitude towards the product. Importantly, not all attitudes are equally effective in guiding behaviour, and we will describe how attitudes can differ not only in their valence, but also in how consequential they are. Understanding both how to change attitudes and make them consequential requires consideration of the basic processes by which persuasion occurs.

In this chapter, we review how persuasion arises, particularly in the domain of marketing and consumer behaviour. To organize the processes and findings presented throughout, we use the Elaboration Likelihood Model (ELM) (Petty & Cacioppo, 1986; Petty & Briñol, 2012) as a conceptual framework. The chapter is divided into six sections: (a) the structure of communication and the three key factors of persuasion, (b) the Elaboration Likelihood Model, (c) the multiple roles that communication factors can have in persuasion, (d) the role of tailoring or matching in persuasion, and (e) future directions for consumer persuasion.

Communication factors in persuasion

Persuasion refers to any attempt to alter the contents of someone's mind. Although persuasion can be used to change many things such as a person's specific *beliefs* (e.g., a particular brand of soda has the healthiest ingredients), the literature tends to focus on people's *attitudes*, that is, people's general, summary evaluations (i.e., their positivity or negativity) towards a person, issue or object (Petty, Briñol, & DeMarree, 2007) including products and brands. People tend to behave in accordance with their attitudes – purchasing the products they like, avoiding the ones they don't – so by influencing relevant attitudes through persuasion, one is affecting the likelihood that people will engage in attitude-relevant behaviour, especially if the attitude induced is a strong one (for a review, see Petty & Krosnick, 1995).

When the situation allows for persuasion to occur, a person or a group of people (i.e., the *recipient* or the consumer) receives an appeal (i.e., a *communication*, such as an advertising message or a simple purchase request) from another person or group or company (i.e., the *source* or marketer) in a particular setting (i.e., the *context*). Successful persuasion is said to occur when the recipient's attitude is modified in the desired direction. Although this chapter focuses on attitude change as the key dependent variable, the same persuasion procedures can also be useful for understanding how to influence beliefs, behavioural intentions and other non-evaluative judgements and decisions.

It is also worth noting that the work reviewed in this chapter focuses on the longstanding tradition of assessing the impact of persuasion on the deliberative self-reports of people's attitudes (Haugtvedt & Kasmer, 2008; Petty & Wegener, 1998a). However, the impact of consumer persuasion can be also assessed with measures that tap the more automatic evaluations associated with objects, issues and people (Petty, Fazio, & Briñol, 2009; Gawronski & Payne, 2010). Techniques that assess automatic evaluative associations without directly asking people to report their attitudes are often referred to as *implicit measures* (for a review in the consumer domain, see Perkins & Forehand, 2010). From the perspective of the ELM, sufficient research now makes it clear that the same fundamental processes described in this chapter for understanding changes in explicit measures of attitudes are also useful for understanding changes in automatic evaluations (Briñol, Petty, & McCaslin, 2009).

Source factors

Source factors are the aspects of a person or collection of persons (including companies and other institutions) that are delivering the message. Perhaps the most common source factor studied in the literature is credibility (Kelman & Hovland, 1953). Credibility refers to two aspects of the source: expertise (i.e., how much knowledge the source possesses) and trustworthiness (i.e., the intention of the source to be honest). Early research found that audiences were generally more persuaded when the source of a message was an expert (Rhine & Severance, 1970) or viewed as trustworthy (Mills & Jellison, 1967; Patzer, 1983), though there were notable exceptions (see Briñol & Petty, 2009, for a review on persuasive sources).

In addition to credibility, people's attitudes can also be influenced by the physical attractiveness (Deshields Jr., Kara, & Kaynak, 1996; Kahle & Homer, 1985), the perceived similarity (Brock, 1965) and the general likability (Benoy, 1982) of the person delivering the message. Also, sources that are perceived to be warm or competent (Aaker, Vohs, & Mogliner, 2010) and sources that come from the majority compared to the minority (Martin & Hewstone, 2008) have been capable of enhancing persuasion. Finally, a source's power – his or her control over resources – can also render a source more influential (e.g., Festinger & Thibaut, 1951; Yukl & Falbe, 1991; see Briñol, Petty, Durso, & Rucker, 2015 for a review on powerful sources). Although these simple main effects (more positive sources inducing more persuasion) are common in the literature, we will see shortly that positive sources can sometimes lead to less persuasion depending on the process by which the source factor operates.

Message factors

Message factors comprise what the source says in the message or how the message is organized and structured. A critical aspect of the message is the persuasiveness of its arguments (Petty, Wells, & Brock, 1976). Strong arguments are those that describe consequences or attributes of the object, product, service or brand that are perceived to be desirable, likely, important and

novel (Petty & Wegener, 1991). Likewise, messages offering more arguments in favour of the object can be more persuasive than messages with fewer ones (Silvera, Josephs, & Giesler, 2002; see Petty & Cacioppo, 1984a, for a review on number of arguments).

The type of information a message or an advertisement presents, can also impact its persuasiveness. Such factors include whether the message is simple or complex (Ahearne, Gruen, & Saxton, 2000; Yalch & Elmore-Yalch, 1984), concrete or abstract (Fujita et al., 2008; Spassova & Lee, 2013), contains humour (which varies by culture) (Alden, Hoyer, & Lee, 1993), is low or high in imagery (Petrova & Cialdini, 2008), contains stories or narratives (Green, Brock, & Kaufman, 2004), whether its information argues only in favour of the advocated position (i.e., one-sided) or for both sides (i.e., two-sided; Hovland, Lumsdaine, & Sheffield, 1949; Eisend, 2006) or is pro or counter-attitudinal (see Clark & Wegener, 2013, for a review on message direction). Although early research tended to show that message factors only worked in one direction (e.g., more arguments leading to more persuasion), it is possible for all message features to produce a diversity of results as we'll see later. For example, adding more arguments can lead to less persuasion if those arguments are weak and people are thinking carefully (Petty & Cacioppo, 1984a).

Recipient factors

Recipient factors refer to aspects of the individuals receiving the message (i.e., the audience). These factors can range from demographic features such as one's gender to persistent characteristics such as one's intelligence and personality type (Briñol & Petty, 2005). Even the society in which one was raised, be it individualistic or collectivistic, can influence the effectiveness of a persuasive appeal (Shavitt, Nelson & Yean, 1997). Additionally, recipient factors can be more transitory such as whether the audience is momentarily feeling powerful or happy (see Petty & Briñol, 2015a, for a review on emotion and persuasion). Similar to source and message factors, some early research showed that recipient factors produced main effects on persuasion. For example, as intelligence decreased, the likelihood of persuasion tended to increase (Rhodes & Wood, 1992). Conversely, as consumers became more knowledgeable about marketing tactics, persuasion tended to be reduced (Friestad & Wright, 1994; Obermiller & Spangenberg, 1998), whereas making recipients happy (e.g., with pleasant music in an ad) tended to increase persuasion (DeCarlo & Barone, 2009; Gorn, 1982). However, as we describe later in this chapter, these main effect results represent only part of the picture, and they can reverse depending on the circumstances.

Thus, whether it is aspects of the source, the advertisement itself, or the individual who receives the message, there are a multitude of variables that can affect consumer persuasion. However, research over the years has shown that some of the same source, message and recipient factors that increase persuasion are also capable of decreasing it. Although researchers quarrelled about inconsistencies like these for decades, an examination of the psychological processes responsible for attitude change can organize and explain these seemingly contradictory results. We turn to these processes next.

Processes of persuasion

Over the past 50 years, numerous theories have tried to account for the psychological processes involved in attitude change (for a historical review, see Briñol & Petty, 2012). At the outset, persuasion researchers tended to focus on a single outcome for any variable (e.g., positive emotions should always increase persuasion) and a single process by which a variable had its effect (see Petty, 1997; Petty & Briñol, 2008); though as noted, the accumulating research showed

that a given feature sometimes increased persuasion whereas at other times it decreased it. Furthermore, some attitude changes lasted longer and were more likely to guide behaviour than other changes.

Contemporary theories of persuasion have been generated to articulate the multiple ways in which variables can affect attitudes in different situations. In the present review, we focus on the Elaboration Likelihood Model (ELM) (Petty & Cacioppo, 1986; Petty & Wegener, 1998a; Petty & Briñol, 2012). Other dual process and dual system approaches following the ELM share some similar features (e.g., the heuristic-systematic model) (Chaiken, Liberman, & Eagly, 1989) (and the unimodal) (Kruglanski & Thompson, 1999), but the ELM continues to be the one guiding more research on persuasion and attitude strength (see Sherman, Gawronski, & Trope, 2012, for other dual process/system approaches to judgement).

The elaboration likelihood model

According to the ELM We have the very same citations in the previous paragraph, so maybe we can just drop them here the psychological processes responsible for the effects of variables on attitude change can be organized into a finite set that operate at different points along an elaboration continuum, going from very low (even automatic) thinking to very high. The theory predicts that under low thinking conditions, variables influence attitudes by operating as simple judgement cues or heuristics (e.g., I like your product because I like you). When the likelihood of thinking is relatively high, variables can impact the extent of influence by more thoughtful means such as by influencing the direction of the thoughts that come to mind (i.e., whether they are favourable or unfavourable), serving as a piece of evidence (i.e., an argument) to be scrutinized, or impacting the confidence people have in the thoughts they generated and thus how much the recipient relies upon those thoughts. The theory furthermore asserts that when elaboration is not constrained to be very low or high, variables can influence attitudes by affecting the amount of thinking that occurs. Thus, as we explain and provide evidence for next, the ELM describes several processes by which variables can affect persuasion in different situations.

Affecting the amount of thinking

One way in which a variable can affect persuasion is through increasing or decreasing the motivation or ability to think about the influence attempt. For example, people might not have the ability to think about a complex or long message unless it is presented more than one time. That is, message repetition is one variable that enables people to engage in greater thinking (Cacioppo & Petty, 1979, 1989; Gorn & Goldberg, 1980; Ratneshwar & Chaiken, 1991). In contrast, if the speaker talks too fast, thinking about the message is disrupted (Smith & Shaffer, 1995). Increasing thinking tends to enhance persuasion if the arguments are strong but reduces it if they are weak. The reverse is true for reducing thinking. To demonstrate this effect with disrupted thinking, Petty, Wells and Brock (1976) gave students strong or weak arguments in favour of a tuition increase, while at the same time the students either did or did not have to engage in a distracting secondary task. When strong arguments were presented, distraction disrupted thinking and diminished persuasion by reducing the favourable thoughts that would have been generated. When weak arguments were presented, however, disrupting thinking actually enhanced persuasion by reducing the counterarguing that would have occurred. Following this study, a manipulation of argument quality has been used in many additional studies to gauge the impact a variable has on message processing. That is, the argument quality effect on attitudes should become larger as message processing is increased and

reduced as processing is disrupted. Furthermore, just as there are different situational factors that influence a person's ability to process a message (e.g., repetition, distraction), there are also individual differences influencing ability to think such as the amount of accessible knowledge on the topic (Wood, Rhodes, & Biek, 1995) and previous experience (Wu & Shaffer, 1987).

Now, even if a consumer has all day to elaborate upon an advertisement, should the consumer have no interest in the product advertised, any persuasive appeal on its behalf will not be processed very carefully. Therefore, in addition to ability, the person must also be motivated to think about the message. Although there are many determinants, perhaps the most important is the message's perceived *personal relevance* (Petty & Cacioppo, 1979b, 1990). Whenever the message can be linked to some aspect of the message recipient's "self", such as through the recipient's values, goals, outcomes and identities, it can enhance self-relevance and increase the likelihood of processing the message (e.g., Blankenship & Wegener, 2008; Fleming & Petty, 2000). In an early consumer demonstration of this, Petty, Cacioppo and Schumann (1983) varied participant's interest in an advertisement for the "Edge Razor" by informing them that they would receive a razor for participating in the experiment (high relevance) or a tube of toothpaste (low relevance). Subsequently, participants were exposed to a razor advertisement containing either strong (e.g., "In direct comparison tests, the Edge blade gave twice as many close shaves as its nearest competitor") or weak (e.g., "In direct comparison tests, the Edge blade gave no more nicks or cuts than its competition") arguments. Petty et al. found larger argument quality effects (i.e., more persuasion for the strong than weak arguments) when the razor advertisement was high as opposed to low in personal relevance.

Other variables that have been shown to impact the amount of thinking include messages with personalized addresses (Howard & Kerin, 2004), the use of rhetorical questions (Ahluwalia, Burnkrant, Mick, & Brucks, 2004; Petty, Cacioppo, & Heesacker, 1981), one's level of anxiety (Sengupta & Venkataramani, 2001) and one's doubt or uncertainty regarding the message (Ziegler, Diehl, & Ruther, 2002). Individual traits also affect one's motivation to think such as one's *need for cognition*, that is, one's desire to engage in thoughtful, cognitive activities (e.g., Cacioppo, Petty, & Morris, 1983). Individuals high in need of cognition are more influenced by the quality of a message and less by simple cues than those low in need of cognition (for reviews, see Cacioppo, Petty, Feinstein, & Jarvis, 1996; Petty, Briñol, Loersch, & McCaslin, 2009). A recent meta-analysis (Carpenter, 2014) found 134 studies with over 15,000 participants testing the ELM hypothesis that variables affecting thinking would interact with argument quality to produce persuasion and concluded that the available data were consistent with the ELM predictions.

Low thinking processes

When motivation and/or ability to think about the persuasive proposal are relatively low, according to the ELM (Petty & Wegener, 1998a), source, message and recipient variables are likely to exert their influence by serving as simple cues or input to simple heuristics. Heuristics are rules of thumb such as "foods recommended by the doctor in this ad are probably good for me" (Chaiken, 1980). The ELM predicts that when thinking is low, people do not rely much on a personal assessment of the merits of the consumer proposal in forming their attitudes but rely instead on a variety of simple cues from the source, the message or the situation that become associated with the product or serve as input to a simple decision rule.

Under conditions of low elaboration, source variables such as credibility have been shown to serve as a simple positive cue to persuasion. For example, when messages deal with unimportant or irrelevant issues (low motivation to think), irrespective of the actual merits of the

arguments presented, individuals are likely to be more persuaded by credible sources compared to non-credible sources (Petty, Cacioppo, & Goldman, 1981). This can be understood as resulting from the use of a simple heuristic or association such as, "If an expert and trustworthy source supports this position, it must be good". Other variables have shown similar cue effects under low thinking conditions, such as source attractiveness (Chaiken, 1987), source majority status (Horcajo, Briñol, & Petty, 2014), length of the message (Petty & Cacioppo, 1984a) or recipient mood (Petty, Schumann, Richman, & Strathman, 1993).

In addition to heuristics, low elaboration consumers can be influenced by simple associative connections, as in the case of evaluative conditioning where repeatedly pairing an attitude object with something good enhances positive evaluations (Razran, 1940; Staats & Staats, 1958). When thinking is low, one noteworthy feature of variables serving as simple cues is that they impact attitudes in the direction of their valence. For example, if attractiveness of the source and being happy are positively valenced, they will result in more positive attitudes. When these same variables serve in other roles, though, their impact on attitudes need not be positive.

High thinking processes

When motivation and ability to think are high, people will engage in careful thought, assessing the relevance and the merits of *all* of the information available. As already explained, in such situations, the quality or cogency of the information presented will be an important determinant of how effective the persuasion attempt is. Below we articulate additional processes that variables can influence when thinking is high.

Biasing thoughts

When thinking is high, variables can bias the nature of the thoughts that are generated. That is, some features of the persuasion context increase the likelihood of favourable thoughts being elicited, whereas others increase the likelihood of unfavourable thoughts. For example, if people are put in a good mood prior to hearing an involving message, their thoughts will be biased in favour of the message (Petty et al., 1993). On the other hand, instilling "reactance" (Brehm, 1966) in message recipients by telling them that they have no choice but to be persuaded on an important issue motivates counterarguing (or negative thoughts), even when the arguments used are strong (Petty & Cacioppo, 1979a). Biased thinking, then, whether favourable or unfavourable, often reduces the impact of message quality on persuasion compared to objective thinking.

In general, any time a message takes a position opposed to one's attitudes, values, personal identity or preferred outcome, people will tend to be biased against it. When a message takes a position in favour of those variables, though, people will be biased in favour of it (Petty & Cacioppo, 1990; see Clark & Wegener, 2013, for a review). To be clear, and as noted earlier, when a message is framed as relevant to one's values, identity or preferred outcomes, the *extent* of information processing is affected, but when a message takes a particular position on them, the *valence* of the processing can be affected. However, the potential for biased thinking to occur is enhanced when the message itself is somewhat ambiguous so that the recipient can interpret it in either a favourable or unfavourable way (Chaiken & Maheswaran, 1994).

Serving as an argument

Under high elaboration conditions, variables can also serve as arguments. When processing carefully, all aspects of the communication are scrutinized as to whether or not they provide

evidence for changing an attitude or adopting the advocated position. For example, the attractiveness of a source could be considered an argument for relevant advocacies such as for beauty products, but will likely operate through other processes for proposals and products unrelated to looks (Petty & Cacioppo, 1984b; cf., Pierro, Mannetti, Kruglanski, & Sleeth-Keppler, 2004). Similarly, one's culture can also moderate whether a variable is treated as a cue or an argument. For example, in independent cultures, where people emphasize viewing the self as unique or distinct to others (e.g., Hui & Triandis, 1986), consensus support for an attitudinal position is perceived as a simple cue and works best when thinking is relatively low. However, in collectivist cultures, where people emphasize viewing the self as interconnected to others, consensus information can be perceived as an argument and works when thinking is high (Aaker & Maheswaran, 1997).

For a variable to serve as an argument it has to be evaluated as direct evidence for the merits of the attitude object. For example, Martin, Abend, Sedikides and Green (1997) examined how participants evaluated a story that was designed to make them happy or sad. Because a core goal of the story was the mood it was supposed to evoke, participants' moods could be viewed as a relevant argument. Thus, if a story were designed to make people sad, actually feeling sad would be a strong argument in favour of the merits of the story; however, feeling happy would make the story seem less effective. Although negative emotions such as sadness or fear could serve as negative cues for disliking if thinking is low, it can lead to positive evaluations if these are the intended states and thinking is high.

Validation

When thinking is high, there is yet another process through which a variable can influence the degree of persuasion: thought validation. Recent research suggests that people not only have thoughts, but they can have thoughts about their thoughts, or *metacognitions* (Petty, Briñol, Tormala, & Wegener, 2007; Briñol & DeMarree, 2012). One feature of thoughts that has proven to be useful is the confidence with which people hold their thoughts. That is, two consumers can have the same favourable thought about the message (e.g., iPhones have long battery life), but one consumer can have considerably more confidence in the validity of that thought than another person. Similarly, two consumers might have the very same thought about a product, but one of them may feel better about that thought (e.g., this thought makes me feel good), using it more when forming a final evaluation about the product (Briñol, Petty, & Barden, 2007). According to the *self-validation hypothesis* (Petty, Briñol, & Tormala, 2002), influencing thought-confidence and thought-liking when thinking is high can increase or decrease the persuasiveness of the appeal depending on the dominant direction of thoughts. In support of this idea, Briñol, Petty and Tormala (2004) found that when the thoughts in response to an advertisement were primarily favourable, increasing confidence in their validity increased consumer persuasion, but increasing doubt in their validity decreased consumer persuasion. When the thoughts to a message were mostly unfavourable, however, increasing confidence in their validity reduced persuasion, but undermining confidence increased it.

Research on self-validation has shown that this mechanism can account for some already established persuasion outcomes (e.g., more persuasion with happy rather than sad mood, with high over low credibility sources, when argument generation is easy rather than difficult), but by a different process than postulated previously (see Briñol & Petty, 2009, for a review). It is worth noting that self-validation processes have two boundary conditions: (1) there must be relatively *high* levels of thinking, and (2) the confidence should be salient *during* or *following* thought generation rather than *prior* to it. If confidence is salient prior to thinking, it tends to

reduce the amount of thinking by validating one's initial viewpoint thereby reducing the need for processing new information (Tiedens & Linton, 2001).

Correction for perceived bias

Finally, under high elaboration conditions, variables can lead individuals to notice and respond to a potential bias in their thinking and attempt to correct for such bias. Specifically, because people are motivated to hold correct attitudes, under careful scrutiny they might detect factors that they believe are biasing their judgements and make an effort to correct for them (e.g., if an emotion induction in an advertisement was seen as particularly blatant [DeSteno et al., 2004]). If people have doubt in their thoughts because they fear that their thoughts might have stemmed from some biasing factor in the situation or some prejudice they have, they could attempt to explicitly correct for their biased thoughts in accordance with the mechanism specified by the Flexible Correction Model (FCM) (see Wegener & Petty, 1997, for a review). That is, people might estimate the magnitude and direction of the perceived biasing effect on their judgements and attempt to adjust for it. To the extent that they correct too much, reverse effects of variables can be obtained (Petty & Wegener, 1993; Wegener & Petty, 1995; Wilson & Brekke, 1994).

For example, in one study (Petty, Wegener, & White, 1998), when people became aware that a likable source might be biasing their attitudes, they became more favourable towards the proposal when it was endorsed by a dislikeable than a likable source. Such explicit corrections typically require relatively high degrees of thinking. However, if certain corrections are practiced repeatedly, they can require less effort and even become automatic (e.g., Glaser & Banaji, 1999; Maddux et al., 2005). Of course, people must be motivated and aware of a bias in order to correct for it (for further discussion, see Wegener & Petty, 1994).

Consequences of different processes

According to the ELM, attitudes formed or changed through high thinking processes are more consequential (stronger) than those changed through low thinking processes (Petty, Haugtvedt & Smith, 1995, for a review). That is, although some attitudes are weak and relatively inconsequential, others have greater impact. The term *attitude strength* is used to describe the quality of attitudes that allows them to persist over time, resist persuasion, affect information processing and guide behaviour (Petty & Krosnick, 1995). Some of the features associated with strong attitudes include the following: low ambivalence (Armitage & Conner, 2000), high accessibility (Bassili & Fletcher, 1991; Fazio et al., 1982; Hodges & Wilson, 1994) high commitment (Kiesler, 1971) and high attitude certainty (Bassili, 1996; Rucker, Tormala, Petty, & Briñol, 2014). Possessing these features increases the strength of an attitude and thus the likelihood that an individual will use and maintain that attitude over time.

Importantly, elaboration increases the likelihood that a newly changed attitude will possess the several features of a strong attitude (see Petty et al., 1995, for a review). There are both structural and metacognitive reasons for this. First, as thinking increases during attitude change, people should acquire more support for their attitudes and their attitudes should become more accessible and well-integrated in the knowledge structure. Second, people often become more committed to and confident in their views with greater thinking. Each of these factors would increase the likelihood that an attitude would be consequential.

One example of the link between elaboration and strength comes from a study by Haugtvedt and Petty (1992). In this research, individuals who varied in their need for cognition were exposed to a television ad for an answering machine in the context of a television programme.

The ad was designed to contain compelling arguments as well as positive cues so that comparably favourable attitudes would be induced regardless of the level of thinking. Attitudes towards the answering machine were measured immediately following the ad and then again two days later. At the delayed period, need for cognition predicted the extent of persistence (i.e., the amount of attitude change) of the initial attitude. That is, those higher in need for cognition (who would have processed the message carefully initially) tended to persist in their new favourable attitudes, but those lower in need for cognition (who would have relied on simple cues at the time of initial exposure) did not (see Boninger et al., 1990; Chaiken, 1980, for similar results).

In summary, through the mechanism of both low and high thinking, we can now understand when and why certain variables affect persuasion. Knowing the mechanism is important because as just noted, according to the ELM, when variables produce attitude change through high thinking processes, the new attitudes are more persistent, resistant to further change, and predictive of behaviour than when the same changes occur via low thinking processes.

Multiple roles for persuasion variables

So far, we have examined the factors of persuasion in the separate contexts of high, low and unconstrained thinking. However, the same variable that served as a cue under low thinking conditions could serve as an argument under high thinking and affect the amount of thinking when it is unconstrained. Next, we provide an example from research on one variable to illustrate how any given variable can affect attitudes in each of the roles postulated. For our example, consider whether the message recipient is in a relatively happy or sad state. How should this affect persuasion?

First off, one's emotional state can affect the amount of thinking one does about a message when thinking is unconstrained. Typically, sadness tends to increase elaborative processing over happiness because it indicates that something is wrong and needs to be addressed (Schwarz, Bless, & Bohner, 1991). In contrast, happiness indicates that things are fine the way they are (Worth & Mackie, 1987). However, if thinking is already low (e.g., because of distraction), being happy can increase persuasion compared to sadness through the peripheral route by serving as a simple associative cue or input to a decision rule ("If I feel good, I must like it") (e.g., Bosmans & Baumgartner, 2005). On the other hand, if thinking is high, feeling happy can enhance persuasion by biasing the direction of one's thoughts, increasing the number of positive thoughts one generates towards the appeal (Petty et al., 1993) or making good consequences seem more likely and bad consequences seem less likely (Wegener, Petty, & Klein, 1994). If relevant to the persuasive appeal, happiness can also be evaluated as an argument for the attitude object (Martin et al., 1997).

In addition to these primary cognitions, emotions can also affect the perceived validity of one's thoughts when the feelings follow (rather than precede) processing, by increasing or decreasing the certainty one has in one's thoughts. For example, if people feel happy following the generation of positive thoughts, they will rely on them more and be more persuaded, but if happiness follows generation of negative thoughts, people will rely on them more and be less persuaded than if sadness follows thought generation (Briñol et al., 2007).

However, if emotions are made too salient such that individuals perceive them to be biasing their thoughts (e.g., consumers perceive a happy TV programme is affecting their ensuing evaluation of a commercial), the individual will be motivated to correct his or her attitude and effects opposite to the perceived bias (Berkowitz, Jaffe, Jo, & Troccoli, 2000). Importantly, induced emotions can result in the same degree of attitude change regardless of the process (Petty et al., 2003), but when emotion acts under high elaboration to increase persuasion, the attitude change will last longer, be more resistant to persuasion, and be more likely guide attitude consistent behaviour (see Petty & Briñol, 2015a, for a review).

Other prominent variables in communication, that is, features of the source such as credibility and attractiveness, have also been shown to demonstrate these varied outcomes, such as affecting the amount of thinking one does when it is unconstrained (Puckett, Petty, Cacioppo, & Fisher, 1983) and serving as a simple peripheral cue when thinking is low (Priester & Petty, 1995). However, when thinking is high, these same variables can and serve as a substantive argument (Petty & Cacioppo, 1984b), bias thoughts (Chaiken & Maheswaran, 1994), affect the perceived validity of one's thoughts (Briñol et al., 2004) as well as influence someone to correct for a perceived bias in their attitude (Petty, Wegener & White, 1998). To date, a number of other variables have been shown to operate in these multiple roles in the predicted circumstances. These include recipient power (Briñol et al., 2015), ease of retrieval (Briñol, Tormala, & Petty, 2013) and bodily responses (Briñol, Petty, & Wagner, 2012), to name just a few (for a review, see Petty & Briñol, 2015b).

Matching

Up to this point, we have focused on the multiple processes by which communication factors in isolation can impact attitudes and persuasion in different situations. However, these individual variables can also interact with each other in affecting persuasion processes and outcomes. To highlight this interplay, we next focus on the outcomes of when a variable within the recipient, message, and/or source *matches* another factor of the persuasion situation (for more extensive reviews on matching, see Briñol & Petty, 2006; Petty, Wheeler, & Bizer, 2000; Salovey & Wegener, 2003).

We begin with the well-validated notion that people tend to like things that are associated with themselves more than things that are associated with others (e.g., Kahneman, Knetsch, & Thaler, 1990). For example, people overvalue their in-group compared to out-groups (Tajfel, 1981) and find their own arguments more convincing than those generated by others (Greenwald & Albert, 1968). People also value and are more interested in things associated with themselves, as shown with self-relevance increasing information processing (Petty & Cacioppo, 1979b). Furthermore, most people tend to find things associated with themselves easier to process (Briñol et al., 2013). Thus, based on these features (familiarity, liking and interest), matching a message to the self has the potential to impact attitudes and persuasion through the same multiple processes documented previously.

Currently, many different types of matching have been demonstrated throughout the literature. For example, research has shown that by matching a quality of the message's source, such as the gender, to that of the recipient (e.g., a woman delivering an appeal to a woman) can increase the persuasiveness of the message (see Fleming & Petty, 2000). Other examples of variables that have shown this main effect for matching include need for cognition (Bakker, 1999), sensation seeking (Palmgreen, Stephenson, Everett, Baseheart, & Francies, 2002), the functional basis of attitudes (Pratkanis & Gilner, 2005) and affect versus cognition (Fabrigar & Petty, 1999). Even one's culture can account for this effect. For example, advertisements appealing to one's independence and personal success are more persuasive to people from Western countries (i.e., individualistic cultures which promote traits like these) than people from Eastern countries (i.e., collectivist cultures). However, the opposite is true for advertisements appealing to collectivist values, like in-group benefits and family integrity (Han & Shavitt, 1994; Zhang & Gelb, 1996). However, without understanding the process through which matching can increase (or decrease) persuasion, we cannot account for when it will or will not occur. By applying the ELM, though, we can begin to better understand these effects.

Understanding matching with the ELM

According to the ELM, matching can influence attitudes by the same fundamental processes described so far for variables like emotion and source credibility (e.g., see Petty, Barden, & Wheller, 2009). For example, one of the variables that has been studied the most with respect to matching is *self-monitoring*, or the degree to which one orients him or herself towards social approval (Snyder, 1974). High self-monitors are very attentive to modifying their behaviour to their current social circumstances, whereas low self-monitors are more motivated to be consistent with their internal beliefs and values. In a study by Petty and Wegener (1998b), researchers matched or mismatched advertisements with cogent or flimsy arguments to individuals who differed in levels of self-monitoring. That is, high and low self-monitors either read social image (e.g., how good a product makes you look) or quality (e.g., how efficient a product is) appeals that contained either strong or weak arguments. For the participants who read advertisements that matched their self-monitoring status (i.e., social image messages for high self-monitors and quality messages for low self-monitors), the strength of the arguments had a larger effect on attitudes compared to those who received mismatched advertisements, an indication that matching enhanced information processing thereby increasing the impact of message quality on attitudes (see also DeBono & Harnish, 1988; Fujita et al., 2008; Petracchio & Meyers-Levy, 1997; Wan & Rucker, 2013; Wheeler, Petty, & Bizer, 2005).

When the likelihood of elaboration is constrained to be low, however, a match between the message and the consumer is more likely to influence attitudes by serving as a simple cue (e.g., DeBono, 1987). For example, if a source simply asserts that the arguments are consistent with a low self-monitor's values, if thinking is not high, this simple match to the self can produce persuasion with the reasoning, "If it links to my values, it must be good!" In contrast, when thinking is set to a high level (e.g., a topic of high personal interest; high accountability for a decision), then matching could enhance persuasion by biasing the direction of thinking. Indeed, some research suggests that high self-monitors are more motivated to generate favourable thoughts to messages that make an appeal to image rather than an appeal to values (e.g., Lavine & Snyder, 1996).

Yet another role for matching is provided by the self-validation hypothesis. For example, Evans and Clark (2012) showed that thought-confidence increased when the characteristics of the source matched (vs. mismatched) the characteristic of the recipient. These researchers showed that high (vs. low) self-monitors relied more on their thoughts when the source was attractive (vs. credible), which increased persuasion for positive thoughts but decreased persuasion for negative thoughts (for an additional example of matching increasing thought validation, see Huntsinger, 2013). This metacognitive role would be more likely to occur under relatively high elaboration conditions and when the match follows message processing.

Future avenues in matching research

In this chapter, we have shown matching is relatively prolific throughout the literature; however, there are still areas and applications of matching that have yet to be fully examined. In the final section of this chapter, we discuss areas that matching research has begun to explore but deserve further consideration.

Correcting for matching

Similar to the communication variables discussed previously, if people are made aware of the potential bias induced by matching, they may be prone to correct for it. For example, if a

consumer recognizes that an ad is being specifically matched to him or her to increase persuasion, he or she may intentionally correct in the opposite direction of the appeal's intention. In one study, Cessario, Grant and Higgins (2004) manipulated whether or not a persuasive appeal for an after-school programme matched the individual's strategy for goal pursuit (i.e., either promotion-focused or prevention-focused) and whether or not the individuals were made aware of the biasing effects of matched messages. Although naive participants found the matched message to be more persuasive, those who were made aware of the effect by highlighting the source for their feelings of "rightness" corrected for their bias and actually found the *mismatched* message more persuasive.

Other research has also revealed that personalized (i.e., matched) messages may not always be more effective – or at least these favourable personalization effects are subject to moderation by external factors (as meta-analyzed in Noar et al., 2007). For example, when people don't see a legitimate reason for why their personal information was used in a highly personalized message, effectiveness is decreased (White, Zahay, Thorbjornsen, & Shavitt, 2008). Similarly, highly personalized messages may not generate desirable responses from individuals who possess interdependent or collectivist tendencies (versus those with independent tendencies; Li, Kalyanaraman, & Du, 2011; Kramer, Spolter-Weisfeld, & Thakkar, 2007). Moreover, when people anticipate feelings of regret associated with personalized products, they may select standard ones instead (Syam, Krishnamurthy, & Hess, 2008).

When matching decreases (vs. increases) thinking

The thrust of evidence so far has demonstrated how matching often increases influence, and one mechanism for this is that matching increases thinking about the arguments when it is not otherwise constrained. The question remains though: Are there boundary conditions wherein matching can sometimes decrease thinking? Petty and Wegener (1998a, p. 230) suggested that "if people form stronger expectations about what a message will say … they would be more surprised when the message violates these expectations". That is, if one expects a persuasive message to match the participant's already held views, he or she may be less likely to scrutinize the message due to the belief that he or she already knows what to expect (Hastie, 1984; Maheswaren & Chaiken, 1991). In contrast, if people are surprised by the position taken, information processing will be increased (Baker & Petty, 1994). Previously, we reviewed evidence demonstrating how matching could increase elaboration by making the message content seem more self-relevant to the recipient. What happens, however, when matching instead leads the recipient to simply perceive the message content as expected or already known?

Some initial work on this comes from Smith and Petty (1996) who found that if a message mismatched what people expected (e.g., if the participants expected a positively-framed message and received a negatively-framed one), argument quality had a larger impact on attitudes than if the position matched what was expected, implying greater message scrutiny. A cross-cultural study (Aaker & Williams, 1998) also examined this expectancy violation with advertisements for camera film in both the United States and China. In the U.S., consumers are accustomed to ads that use Western-valued emotions (e.g., delight), whereas in China, consumers are accustomed to ads that use Eastern-valued emotions (e.g., calmness). Thus, when researchers mismatched ad expectations (e.g., a delight-focused appeal for the Chinese), they found greater argument quality effects than when the ad was matched.

Additional evidence for this mismatching increasing processing effect comes from Ziegler (2010) who put participants in either a good or bad mood and then manipulated the source of a message to have high or low likability. Past research has shown that people come to have

mood-congruent expectations for the valence of a source (e.g., a positive mood leads to expectations of a positive source) (Mayer, Gaschke, Braverman & Evans, 1992). Therefore, a match to expectations in this instance would be constituted under the good mood/likable source condition and the bad mood/unlikable source condition. Once more, if expectancy violation leads to more processing than confirmation, the mismatching condition should lead to greater argument quality effects than matching would – which was exactly what was found (see also Baker & Petty, 1994; Ziegler, 2010; Ziegler et al., 2002). In brief, these studies show that if matching is to expectations, it is the mismatching condition that leads to greater scrutiny (due to surprise). On the other hand, if matching is to the self, then the matching condition produces the greater scrutiny (due to the enhanced interest from personal relevance).

In addition to surprise and expectancy violation paradigms, there might be other processes and conditions under which matching could decrease thinking. For example, if the confidence that emerges from matching validates the belief that one already knows enough about the topic, or if it increases the sense of validity in one's existing attitude, then matching would be expected to undermine thinking. This would be most likely when the sense of matching precedes the processing of the message.

Matching and self-persuasion

All of the matching research reviewed so far has shown how matching influences responses to messages generated by external sources. However, one new avenue for exploring matching is within the realm of self-persuasion, and specifically, its relation to argument generation (rather than reception). Prior research has shown that matching can influence the number and the content of thoughts people generate in response to persuasive messages generated by others. A relevant question, then, is to what extent matching can also influence the thoughts consumers themselves generate in the absence of persuasive messages.

Imagine for a moment that a consumer is trying to convince him or herself to purchase a new treadmill instead of a television. In the absence of any kind of persuasive appeal from a company, what kind of arguments will the consumer generate to influence his or her decision? In one study by Shavitt, Lowery and Han (1992), individuals who were high versus low in self-monitoring were presented with consumer products that could be ambiguously categorized as either utilitarian or social identity based (e.g., watches and sunglasses). Participants were then asked to generate and design ads that would "explicitly appeal to themselves". Paralleling prior matching effects, low self-monitors constructed ads composed mostly of utilitarian arguments, whereas high-self monitors made ads mostly composed of social identity-based arguments.

Another example of this effect comes from Rucker and Galinski (2009) who examined power. The researchers proposed that powerful people value products for their quality or functionality (because such features support their own argentic goals), whereas less powerful people value products for their ability to confer status (because these features promote their goals of attaining the esteem of others). Thus, when participants were asked to generate slogans for a BMW, the results showed that participants assigned to the high-power condition tended to focus their slogans on performance, whereas those in the low-power condition tended to focus their slogans on prestige. Together, these two studies suggest that people tend to generate arguments that match their own personality or cognitive style, exactly those arguments that tend to be the most effective when generated by others.

In their analysis of self-persuasion, Maio and Thomas (2007) described two types of strategies: epistemic and teleological. Epistemic strategies try to restructure one's cognitions to align with the desired outcome attitude (e.g., reinterpreting undesired attributes of an object to be more positive).

In contrast, teleological strategies attempt to reduce the accessibility of the undesired attitude (e.g., suppressing or distracting oneself from an undesired attribute). Resch and Lord (2011) speculated that epistemic strategies would require greater cognitive processing because they involve generating new thoughts, whereas teleological techniques require greater self-control because they require managing current thoughts. Following a matching logic, Resch and Lord (2011) found that when participants high in Need for Cognition used epistemic strategies (the more cognitively demanding type), it resulted in greater self-persuasion. However, when participants high in self-control used teleological strategies (a task requiring self-control to maintain active thought suppression) (Tangney, Baumeister, & Boone, 2004), it resulted in greater self-persuasion.

A final illustration of this phenomenon comes from research in which people match the effort they invest in generating arguments with the perceived demands of the task. Specifically, research conducted by Briñol, McCaslin and Petty (2012) began with the assumption that people hold the reasonable belief that generating arguments to persuade themselves is more difficult when the topic is counter-attitudinal rather than pro-attitudinal, and they further believe that they know their own opinions better than they know the opinions of others (cf., Dunning, 2012). Because of this, when the topic of the persuasion task is counter-attitudinal, people invest more effort in generating a message designed to persuade themselves than in generating arguments to convince another person of the same position. That is, people can be sure that they are opposed but are less sure of the opposition of the other; thus, they work harder to persuade themselves. The reverse is the case when the message is pro-attitudinal. Here, people invest less effort in generating arguments designed to persuade themselves than another person because they are less sure that the other person already agrees. When the impact on actual self-persuasion was assessed, it followed directly from the effort expended in the persuasion task.

In sum, the concept of matching has been demonstrated in the domain of externally originated persuasion and for self-persuasion. Little work, however, has addressed the relevance of matching for when people spontaneously advocate to others such as in the domain of Word of Mouth effects (Berger, 2014). For example, are advertisements that match a dimension of someone's personality (e.g., extraversion) more likely to be shared subsequently with other people believed to also have that personality dimension (e.g., other extraverted people)? Or more generally, to what extent do people tell others about products and services when they think the others are similar versus dissimilar to them? Future research can benefit from examining whether these and other forms of matching affect the source's willingness to engage in word of mouth influence.

Concluding remarks

We have focused on how source, recipient and context variables can produce (or not produce) persuasion by a variety of high and low effort processes that operate along an elaboration continuum. Although attitude change is possible as a result of relatively low thought processes (e.g., relying on simple cues and inferences), these changes are not as consequential as those induced via high thought processes. In parallel, many of the same psychological processes and outcomes that have been observed in research on receiving and processing external messages have also been observed when consumers generate their own messages in the absence of external information – an area of research worth further exploration. Other important research questions to pursue include: When do people spontaneously attempt to self-persuade themselves? Do they tend to do so through peripheral cues or central arguments? Do matching and mismatching effects work similarly in this context? In sum, the present review not only examined the psychological processes relevant for understanding the influence of single variables; it also addressed

instances where multiple variables, such as in matching effects, interact to provide a host of outcomes.

References

Aaker, J. L., & Maheswaran, D. (1997). The effect of cultural orientation on persuasion. *Journal of Consumer Research, 24*(3), 315–328.

Aaker, J., Vohs, K. D., & Mogilner, C. (2010). Nonprofits are seen as warm and for-profits as competent: Firm stereotypes matter. *Journal of Consumer Research, 37*(2), 224–237.

Aaker, J. L., & Williams, P. (1998). Empathy versus pride: The influence of emotional appeals across cultures. *Journal of Consumer Research, 25*(3), 241–261.

Ahearne, M., Gruen, T., & Saxton, M. K. (2000). When the product is complex, does the advertisement's conclusion matter? *Journal of Business Research, 48*(1), 55–62.

Ahluwalia, R., Burnkrant, R. E., Mick, D. G., & Brucks, M. (2004). Answering questions about questions: A persuasion knowledge perspective for understanding the effects of rhetorical questions. *Journal of Consumer Research, 31*(1), 26–42.

Alden, D., Hoyer, W., & Lee, C. (1993). Identifying global and culture-specific dimensions of humor in advertising: A multinational analysis. *Journal of Marketing, 57*(2), 64–75.

Armitage, C. J., & Conner, M. (2000). Attitudinal ambivalence: A test of three key hypotheses. *Personality and Social Psychology Bulletin, 26*(11), 1421–1432.

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.

Bakker, A. B. (1999). Persuasive communication about AIDS prevention: Need for cognition determines the impact of message format. *AIDS Education and Prevention, 11*, 150–162.

Bassili, J. N. (1996). Meta-judgmental versus operative indices of psychological properties: The case of measures of attitude strength. *Journal of Personality and Social Psychology, 71*, 637–653.

Bassili, J. N., & Fletcher, J. F. (1991). Response-time measurement in survey research a method for CATI and a new look at non-attitudes. *Public Opinion Quarterly, 55*(3), 331–346.

Benoy, J. W. (1982). The credibility of physically attractive communicators: A review. *Journal of Advertising, 11*, 15–24.

Berger, J. (2014). Word of mouth and interpersonal communication: A review and directions for future research. *Journal of Consumer Psychology, 24*(4), 586–607.

Berkowitz, L., Jaffee, S., Jo, E., & Troccoli, B. T. (2000). On the correction of feeling-induced judgmental biases. In J. P. Forgas (Ed.), *Feeling and thinking: The role of affect in social cognition* (pp. 131–152). Cambridge, England: Cambridge University Press.

Blankenship, K. L., & Wegener, D. T. (2008). Opening the mind to close it: Considering a message in light of important values increases message processing and later resistance to change. *Journal of Personality and Social Psychology, 94*(2), 196–213.

Boninger, D. S., Brock, T. C., Cook, T. D., Gruder, C. L., & Romer, D. (1990). Discovery of a reliable attitude change persistence resulting from a transmitter set. *Psychological Science, 1*, 268–271.

Bosmans, A., & Baumgartner, H. (2005). Goal-relevant emotional information: When extraneous affect leads to persuasion and when it does not. *Journal of Consumer Research, 32*(3), 424–434.

Brehm, J. W. (1966). *A theory of psychological reactance*. New York, NY: Academic Press.

Briñol, P., & DeMarree, K. G. (2012). *Social metacognition: Thinking about thinking in social psychology*. New York, NY: Psychology Press.

Briñol, P., McCaslin, M. J., & Petty, R. E. (2012). Self-generated persuasion: Effects of the target and direction of arguments. *Journal of Personality and Social Psychology, 102*, 925–940.

Briñol, P., & Petty, R. E. (2005). Individual differences in attitude change. In D. Albarracin, B. T. Johnson & M. P. Zanna (Eds.), *The handbook of attitudes and attitude change* (pp. 575–615). Mahwah, NJ: Lawrence Erlbaum Associates.

Briñol, P., & Petty, R. E. (2006). Fundamental processes leading to attitude change: Implications for cancer prevention communications. *Journal of Communication, 56*, S81–S104.

Briñol, P., & Petty, R. E. (2009). Persuasion: Insights from the self-validation hypothesis. *Advances in Experimental Social Psychology, 41*, 69–118.

Briñol, P., & Petty, R. E. (2012). The history of attitudes and persuasion research. In A. Kruglanski & W. Stroebe (Eds.), *Handbook of the history of social psychology* (pp. 285–320). New York, NY: Psychology Press.

Briñol, P., & Petty, R. E. (2015). Elaboration and validation processes: Implications for media attitude change. *Media Psychology, 18*, 267–291.

Briñol, P., Petty, R. E., Durso, R. O., & Rucker, D. D. (2016). Power and persuasion: Processes by which power influences evaluative judgments. *Unpublished Manuscript.* Columbus, OH.

Briñol, P., Petty, R. E., & McCaslin, M. J. (2009). Changing attitudes on implicit versus explicit measures: What is the difference? In R. E. Petty, R. H. Fazio & P. Briñol (Eds.), *Attitudes: Insights from the new implicit measures* (pp. 285–326). New York, NY: Psychology Press.

Briñol, P., Petty, R. E., & Tormala, Z. L. (2004). Self-validation of cognitive responses to advertisements. *Journal of Consumer Research, 30*, 559–573.

Briñol, P., Petty, R. E., & Wagner, B. C. (2012). Embodied validation: Our body can change and also validate our thoughts. In P. Briñol & K. G. DeMarree (Eds.), *Social metacognition* (pp. 219–240). New York, NY: Psychology Press.

Briñol, P., Petty, R. E., & Barden, J. (2007). Happiness versus sadness as a determinant of thought confidence in persuasion: A self-validation analysis. *Journal of Personality and Social Psychology, 93*, 711–727.

Briñol, P., Rucker, D. D., & Petty, R. E. (2015). Naïve theories about persuasion: Implication for information processing and consumer attitude change. *International Journal of Advertising, 34*, 85–106.

Briñol, P., Tormala, Z. L., & Petty, R. E. (2013). Ease and persuasion: Multiple processes, meanings, and effects. In C. Unkelbach & R. Greifeneder (Eds.), *The experience of thinking: How the fluency of mental processes influences cognition and behavior* (pp. 101–118). London: Psychology Press.

Brock, T. C. (1965). Communicator-recipient similarity and decision change. *Journal of Personality and Social Psychology, 1*(6), 650–654.

Cacioppo, J. T., & Petty, R. E. (1979). The effects of message repetition and position on cognitive responses, recall, and persuasion. *Journal of Personality and Social Psychology, 37*, 97–109.

Cacioppo, J. T., & Petty, R. E. (1989). Effects of message repetition on argument processing, recall, and persuasion. *Basic and Applied Social Psychology, 10*, 3–12.

Cacioppo, J. T., Petty, R. E., Feinstein, J., & Jarvis, W. B. G. (1996). Dispositional differences in cognitive motivation: The life and times of individuals varying in need for cognition. *Psychological Bulletin, 119*, 197–253.

Cacioppo, J. T., Petty, R. E., & Morris, K. (1983). Effects of need for cognition on message evaluation, argument recall, and persuasion. *Journal of Personality and Social Psychology, 45*, 805–818.

Carpenter, C. J. (2014). A meta-analysis of the ELM's argument quality X processing type predictions. *Human Communication Research, 41*, 501–534.

Cesario, J., Grant, H., & Higgins, E. T. (2004). Regulatory fit and persuasion: Transfer from "feeling right". *Journal of Personality and Social Psychology, 86*(3), 388–404.

Chaiken, S. (1980). Heuristic versus systematic information processing in the use of source versus message cues in persuasion. *Journal of Personality and Social Psychology, 39*, 752–766.

Chaiken, S. (1987). The heuristic model of persuasion. In M. P. Zanna, J. Olson & C. P. Herman (Eds.), *Social influence: The Ontario symposium* (Vol. 5, pp. 3–39). Hillsdale, NJ: Lawrence Erlbaum Associates.

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

Chaiken, S., & Maheswaran, D. (1994). Heuristic processing can bias systematic processing: Effects of source credibility, argument ambiguity, and task importance on attitude judgment. *Journal of Personality and Social Psychology, 66*, 460–473.

Clark, J. K., & Wegener, D. T. (2013). Message position, information processing, and persuasion: The Discrepancy Motives Model. In P. Devine & A. Plant (Eds.), *Advances in experimental social psychology* (Vol. 47, pp. 189–232). San Diego, CA: Academic Press.

DeBono, K. G. (1987). Investigating the social adjustive and value expressive functions of attitudes: Implications for persuasion processes. *Journal of Personality and Social Psychology, 52*, 279–287.

DeBono, K. G., & Harnish, R. J. (1988). Source expertise, source attractiveness, and processing of persuasive information: A functional approach. *Journal of Personality and Social Psychology, 55*, 541–546.

DeCarlo, T. E., & Barone, M. J. (2009). With suspicious (but happy) minds: Mood's ability to neutralize the effects of suspicion on persuasion. *Journal of Consumer Psychology, 19*(3), 326–333.

DeShields Jr., O. W., Kara, A., & Kaynak, E. (1996). Source effects in purchase decisions: The impact of physical attractiveness and accent of salesperson. *International Journal of Research in Marketing, 13*(1), 89–101.

DeSteno, D., Petty, R. E., Rucker, D. D., Wegener, D. T., & Braverman, J. (2004). Discrete emotions and persuasion: The role of emotion-induced expectancies. *Journal of Personality and Social Psychology*, 86, 43–56.

Dunning, D. (2012). *Self-insight: Roadblocks and detours on the path to knowing thyself*. New York, NY: Psychology Press.

Eisend, M. (2006). Two-sided advertising: A meta-analysis. *International Journal of Research in Marketing*, 23(2), 187–198.

Evans, A. T., & Clark, J. K. (2012). Source characteristics and persuasion: The role of self-monitoring in self-validation. *Journal of Experimental Social Psychology*, 48, 383–386.

Fabrigar, L. R., & Petty, R. E. (1999). The role of the affective and cognitive bases of attitudes in susceptibility to affectively and cognitively based persuasion. *Personality and Social Psychology Bulletin*, 25, 363–381.

Fazio, R. H., Chen, J. M., McDonel, E. C., & Sherman, S. J. (1982). Attitude accessibility, attitude-behaviour consistency, and the strength of the object-evaluation association. *Journal of Experimental Social Psychology*, 18(4), 339–357.

Festinger, L., & Thibaut, J. (1951). Interpersonal communication in small groups. *The Journal of Abnormal and Social Psychology*, 46(1), 92–99.

Fleming, M. A., & Petty, R. E. (2000). Identity and persuasion: An elaboration likelihood approach. In D. J. Terry & M. A. Hogg (Eds.), *Attitudes, behaviour, and social context: The role of norms and group membership* (pp. 171–199). Mahwah, NJ: Lawrence Erlbaum Associates.

Friestad, M., & Wright, P. (1994). The Persuasion Knowledge Model: How people cope with persuasion attempts. *Journal of Consumer Research*, 21, 1–31.

Fujita, K., Eyal, T., Chaiken, S., Trope, Y., & Liberman, N. (2008). Influencing attitudes toward near and distant objects. *Journal of Experimental Social Psychology*, 44(3), 562–572.

Gawronski, B., & Payne, B. K. (Eds.) (2010). *Handbook of implicit social cognition: Measurement, theory, and applications*. New York, NY: Guilford Press.

Glaser, J., & Banaji, M. R. (1999). When fair is foul and foul is fair: Reverse priming in automatic evaluation. *Journal of Personality and Social Psychology*, 77, 669–687.

Gorn, G. J. (1982). The effects of music in advertising on choice behaviour: A classical conditioning approach. *Journal of Marketing Research*, 46, 94–101.

Gorn, G. J., & Goldberg, M. E. (1980). Children's responses to repetitive television commercials. *Journal of Consumer Research*, 6(4), 421–424.

Green, M. C., Brock, T. C., & Kaufman, G. F. (2004). Understanding media enjoyment: The role of transportation into narrative worlds. *Communication Theory*, 14(4), 311–327.

Greenwald, A. G., & Albert, R. D. (1968). Acceptance and recall of improvised arguments. *Journal of Personality and Social Psychology*, 8, 31–34.

Han, S. P., & Shavitt, S. (1994). Persuasion and culture: Advertising appeals in individualistic and collectivistic societies. *Journal of Experimental Social Psychology*, 30(4), 326–350.

Hastie, R. (1984). Causes and effects of causal attribution. *Journal of Personality and Social Psychology*, 46(1), 44–56.

Haugtvedt, C. P., & Kasmer, J. A. (2008). Attitude change and persuasion. In C. P. Haugtvedt, P. M. Herr & F. R. Kardes (Eds.), *Handbook of consumer psychology* (pp. 419–436). New York, NY: Lawrence Erlbaum Associates.

Haugtvedt, C. P., & Petty, R. E. (1992). Personality and persuasion: Need for cognition moderates the persistence and resistance of attitude changes. *Journal of Personality and Social Psychology*, 63, 308–319.

Hodges, S. D., & Wilson, T. D. (1994). Effects of analyzing reasons on attitude change: The moderating role of attitude accessibility. *Social Cognition*, 11, 353–366.

Horcajo, J., Briñol, P., & Petty, R. E. (2014). Multiple roles for majority versus minority source status on persuasion: When source status follows the message. *Social Influence*, 9, 37–51.

Hovland, C. I., Lumsdaine, A. A., & Sheffield, F. D. (1949). *Experiments on mass communication*. Princeton, NJ: Princeton University Press.

Howard, D. J., & Kerin, R. A. (2004). The effects of personalized product recommendations on advertisement response rates: The "Try This. It Works!" Technique. *Journal of Consumer Psychology*, 14(3), 271–279.

Hui, C. H., & Triandis, H. C. (1986). Individualism–collectivism: A study of cross-cultural researchers. *Journal of Cross-Cultural Psychology*, 17(2), 225–248.

Huntsinger, J. R. (2013). Incidental experiences of affective coherence and incoherence influence persuasion. *Personality and Social Psychology Bulletin*, 39, 792–802.

Kahle, L. R., & Homer, P. M. (1985). Physical attractiveness of the celebrity endorser: A social adaptation perspective. *Journal of Consumer Research*, 11(4), 954–961.

Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1990). Experimental tests of the endowment effect and the coase theorem. *Journal of Political Economy*, 98, 1325–1348.

Kelman, H. C., & Hovland, C. I. (1953). "Reinstatement" of the communicator in delayed measurement of opinion change. *Journal of Abnormal and Social Psychology*, 48, 327–335.

Kiesler, C. A. (1971). *The psychology of commitment: Experiments linking behaviour to beliefs*. New York, NY: Academic Press.

Kramer, T., Spolter-Weisfeld, S., & Thakkar, M. (2007). The effect of cultural orientation on consumer response to personalization. *Marketing Science*, 26(2), 246–258.

Krosnick, J. A., & Petty, R. E. (1995). Attitude strength: An overview. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 1–24). Mahwah, NJ: Lawrence Erlbaum Associates.

Kruglanski, A. W., & Thompson, E. P. (1999). Persuasion by a single route: A view from the unimodel. *Psychological Inquiry*, 10(2), 83–109.

Lavine, H., & Snyder, M. (1996). Cognitive processing and the functional matching effect in persuasion: The mediating role of subjective perceptions of message quality. *Journal of Experimental Social Psychology*, 32(6), 580–604.

Li, C., Kalyanaraman, S., & Du, Y. R. (2011). Moderating effects of collectivism on customized communication: A test with tailored and targeted messages. *Asian Journal of Communication*, 21(6), 575–594.

Maddux, W. W., Barden, J., Brewer, M. B., & Petty, R. E. (2005). Saying no to negativity: The effects of context and motivation to control prejudice on automatic evaluative responses. *Journal of Experimental Social Psychology*, 41, 19–35.

Maheswaran, D., & Chaiken, S. (1991). Promoting systematic processing in low-motivation settings: Effect of incongruent information on processing and judgment. *Journal of Personality and Social Psychology*, 61(1), 13–25.

Maio, G. R., & Thomas, G. (2007). The epistemic-teleologic model of deliberate self-persuasion. *Personality and Social Psychology Review*, 11(1), 46–67.

Martin, L., Abend, T., Sedikides, C., & Green, J. D. (1997). How would I feel if...?: Mood as input to a role fulfilment evaluation process. *Journal of Personality and Social Psychology*, 73, 242–253.

Martin, R., & Hewstone, M. (2008). Majority 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.

Mayer, J. D., Gaschke, Y. N., Braverman, D. L., & Evans, T. W. (1992). Mood-congruent judgment is a general effect. *Journal of Personality and Social Psychology*, 63(1), 119.

Mills, J., & Jellison, J. M. (1967). Effect on opinion change of how desirable the communication is to the audience the communicator addressed. *Journal of Personality and Social Psychology*, 6, 98–101.

Noar, S. M., Benac, C. H., & Harris, M. S. (2007). Does tailoring matter? Meta-analytic review of tailored print health behaviour change interventions. *Psychological Bulletin*, 133(4), 673–693.

Obermiller, C., Spangenberg, E., & MacLachlan, D. L. (2005). Ad skepticism: The consequences of disbelief. *Journal of Advertising*, 34(3), 7–17.

Palmgreen, P., Stephenson, M. T., Everett, M. W., Baseheart, J. R., & Francies, R. (2002). Perceived message sensation value (PMSV) and the dimensions and validation of a PMSV scale. *Health Communication*, 14(4), 403–428.

Patzer, G. L. (1983). Source credibility as a function of communicator physical attractiveness. *Journal of Business Research*, 11(2), 229–241.

Perkins, A., & Forehand, M. (2010). Implicit social cognition and indirect measures in consumer behaviour. In B. Gawronski & B. K. Payne (Eds.), *Handbook of implicit social cognition: Measurement, theory, and applications* (pp. 535–547). New York: Guilford Press.

Petrova, P. K., & Cialdini, R. B. (2008). Evoking the imagination as a strategy of influence. In C. P. Haugtvedt, P. M. Herr & F. R. Kardes (Eds.), *Handbook of consumer psychology* (pp. 505–524). New York, NY: Lawrence Erlbaum Associates.

Petty, R. E. (1997). The evolution of theory and research in social psychology: From single to multiple effect and process models. In C. McGarty & S. A. Haslam (Eds.), *The message of social psychology: Perspectives on mind in society* (pp. 268–290). Oxford, UK: Blackwell Publishers.

Petty, R. E., Barden, J., & Wheeler, S. C. (2009). The elaboration likelihood model of persuasion: Developing health promotions to produce sustained behaviour change. In R. J. DiClemente,

R. A. Crosby & M. Kegler (Eds.), *Emerging theories in health promotion practice and research* (2nd ed., pp. 185–214). San Francisco, CA: Jossey-Bass.

Petty, R. E., & Briñol, P. (2008). Persuasion: From single to multiple to meta-cognitive processes. *Perspectives on Psychological Science, 3*, 137–147.

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

Petty, R. E., & Briñol, P. (2015a). Emotion and persuasion: Cognitive and meta-cognitive processes impact attitudes. *Cognition and Emotion, 29*, 1–26.

Petty, R. E., & Briñol, P. (2015b). Processes of social influence through attitude change. In E. Borgida & J. Bargh (Eds.), *APA handbook of personality and social psychology: Attitudes and social cognition* (Vol. 1, pp. 509–545). Washington, DC: APA Books.

Petty, R. E., Briñol, P., & DeMarree, K. (2007). The meta-cognitive model (MCM) of attitudes: Implications for attitude measurement, change, and strength. *Social Cognition, 25*, 657–686.

Petty, R. E., Briñol, P., Loersch, C., & McCaslin, M. J. (2009). The need for cognition. In M. R. Leary & R. H. Hoyle (Eds.), *Handbook of individual differences in social behaviour* (pp. 318–329). New York, NY: Guilford Press.

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., Briñol, P., Tormala, Z. L., & Wegener, D. T. (2007). The role of meta-cognition in social judgment. In A. W. Kruglanski & E. T. Higgins (Eds.), *Social psychology: Handbook of basic principles* (2nd ed., pp. 254–284). New York, NY: Guilford Press.

Petty, R. E., & Cacioppo, J. T. (1979a). Effects of forewarning of persuasive intent and involvement on cognitive responses and persuasion. *Personality and Social Psychology Bulletin, 5*, 173–176.

Petty, R. E., & Cacioppo, J. T. (1979b). 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. (1984a). The effects of involvement on response 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. (1984b). Source factors and the elaboration likelihood model of persuasion. *Advances in Consumer Research, 11*(1), 668–672.

Petty, R. E., & Cacioppo, J. T. (1986). The Elaboration Likelihood Model of persuasion. *Advances in Experimental Social Psychology, 19*, 123–205. [PB]

Petty, R. E., & Cacioppo, J. T. (1990). Involvement and persuasion: Tradition versus integration. *Psychological Bulletin, 107*, 367–374.

Petty, R. E., Cacioppo, J. T., & Goldman, R. (1981). Personal involvement as a determinant of argument-based persuasion. *Journal of Personality and Social Psychology, 41*, 847–855.

Petty, R. E., Cacioppo, J. T., & Heesacker, M. (1981). The use of rhetorical questions in persuasion: A cognitive response analysis. *Journal of Personality and Social Psychology, 40*, 432–440.

Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of Consumer Research, 10*, 135–146.

Petty, R. E., Haugtvedt, C., & Smith, S. M. (1995). Elaboration as a determinant of attitude strength: Creating attitudes that are persistent, resistant, and predictive of behaviour. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (pp. 93–130). Mahwah, NJ: Lawrence Erlbaum Associates.

Petty, R. E., & Krosnick, J. A. (Eds.) (1995). *Attitude strength: Antecedents and consequences.* Mahwah, NJ: Lawrence Erlbaum Associates.

Petty, R. E., Schumann, D. W., Richman, S. A., & Strathman, A. J. (1993). Positive mood and persuasion: Different roles for affect under high and low elaboration conditions. *Journal of Personality and Social Psychology, 64*, 5–20.

Petty, R. E., & Wegener, D. T. (1991). Thought systems, argument quality, and persuasion. In R. S. Wyer & T. K. Srull (Eds.), *Advances in social cognition* (Vol. 4, pp. 147–161). Hillsdale, NJ: Lawrence Erlbaum Associates.

Petty, R. E., & Wegener, D. T. (1993). Flexible correction processes in social judgment: Correcting for context induced contrast. *Journal of Experimental Social Psychology, 29*, 137–165.

Petty, R. E., & Wegener, D. T. (1998a). Attitude change: Multiple roles for persuasion variables. In D. Gilbert, S. Fiske & G. Lindzey (Eds.), *The handbook of social psychology* (4th ed., Vol. 1, pp. 323–390). New York, NY: McGraw-Hill.

Petty, R. E., & Wegener, D. T. (1998b). Matching versus mismatching attitude functions: Implications for scrutiny of persuasive messages. *Personality and Social Psychology Bulletin, 24*, 227–240.

Petty, R. E., & Wegener, D. T. (1999). The Elaboration Likelihood Model: Current status and controversies. In S. Chaiken & Y. Trope (Eds.), *Dual process theories in social psychology* (pp. 41–72). New York, NY: Guilford Press.

Petty, R. E., Wegener, D. T., & White, P. (1998). Flexible correction processes in social judgment: Implications for persuasion. *Social Cognition, 16*, 93–113.

Petty, R. E., Wells, G. L., & Brock, T. C. (1976). Distraction can enhance or reduce yielding to propaganda: Thought disruption versus effort justification. *Journal of Personality and Social Psychology, 34*, 874–884.

Petty, R. E., Wheeler, S. C., & Bizer, G. (2000). Matching effects in persuasion: An elaboration likelihood analysis. In G. Maio & J. Olson (Eds.), *Why we evaluate: Functions of attitudes* (pp. 133–162). Mahwah, NJ: Lawrence Erlbaum Associates.

Pierro, A., Mannetti, L., Kruglanski, A. W., & Sleeth-Keppler, D. (2004). Relevance override: On the reduced impact of "cues" under high-motivation conditions of persuasion studies. *Journal of Personality and Social Psychology, 86*(2), 251–264.

Pratkanis, A. R., & Gliner, M. D. (2005). And when shall a little child lead them? Evidence for an altercasting theory of source credibility. *Current Psychology: Developmental, Learning, Personality, Social, 23*(4), 279–304.

Priester, J. M., & Petty, R. E. (1995). Source attributions and persuasion: Perceived honesty as a determinant of message scrutiny. *Personality and Social Psychology Bulletin, 21*, 637–654.

Puckett, J. M., Petty, R. E., Cacioppo, J. T., & Fisher, D. L. (1983). The relative impact of age and attractiveness stereotypes on persuasion. *Journal of Gerontology, 38*, 340–343.

Ratneshwar, S., & Chaiken, S. (1991). Comprehension's role in persuasion: The case of its moderating effect on the persuasive impact of source cues. *Journal of Consumer Research, 18*, 52–62. doi: 10.1086/209240.

Razran, G. H. (1940). Conditioned response changes in rating and appraising socio-political slogans. *Psychological Bulletin, 37*(48), 481.

Resch, H. L., & Lord, C. G. (2011). Individual differences in using epistemic and teleologic strategies for deliberate self-persuasion. *Personality and Individual Differences, 50*(5), 615–620.

Rhine, R., & Severance, L. (1970). Ego-involvement, discrepancy, source credibility, and attitude change. *Journal of Personality and Social Psychology, 16*, 175–190.

Rhodes, N., & Wood, W. (1992). Self-esteem and intelligence affect influenceability: The mediating role of message reception. *Psychological Bulletin, 111*, 156–171.

Rucker, D. D., & Galinsky, A. D. (2009). Conspicuous consumption versus utilitarian ideals: How different levels of power shape consumer behaviour. *Journal of Experimental Social Psychology, 45*(3), 549–555.

Rucker, D. D., Petty, R. E., & Briñol, P. (2015). Social psychological foundations of social marketing. In D. Stewart (Ed.), *Handbook of persuasion and social marketing* (Vol. 1, pp. 27–60). Santa Barbara, CA: Praeger Publishers.

Rucker, D. D., Petty, R. E., & Priester, J. R. (2007). Understanding advertising effectiveness from a psychological perspective: The importance of attitudes and attitude strength. In G. J. Tellis & T. Ambler (Eds.), *The handbook of advertising* (pp. 73–88). Thousand Oaks, CA: Sage.

Rucker, D. D., Tormala, Z. L., Petty, R. E., & Briñol, P. (2014). Consumer conviction and commitment: An appraisal-based framework for attitude certainty. *Journal of Consumer Psychology, 24*, 119–136.

Salovey, P., & Wegener, D. T. (2003). Communicating about health: Message framing, persuasion, and health behaviour. In J. Suls & K. A. Wallston (Eds.), *Social psychological foundations of health and illness* (pp. 54–81). Malden, MA: Blackwell Publishing.

Schwarz, N., Bless, H., & Bohner, G. (1991). Mood and persuasion: Affective status influence the processing of persuasive communications. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 24, pp. 161–197). San Diego, CA: Academia Press.

Sengupta, J., & Venkataramani Johar, G. (2001). Contingent effects of anxiety on message elaboration and persuasion. *Personality and Social Psychology Bulletin, 27*(2), 139–150.

Shavitt, S., Lowrey, T. M., & Han, S. P. (1992). Attitude functions in advertising: The interactive role of products and self-monitoring. *Journal of Consumer Psychology, 1*(4), 337–364.

Shavitt, S., Nelson, M. R., & Yuan, R. M.-L. (1997). Exploring cross-cultural differences in cognitive responding to ads. In M. Brucks & D. J. MacInnis (Eds.), *Advances in consumer research* (Vol. 24, pp. 245–250). Provo, UT: Association for Consumer Research.

Sherman, J., Gawronski, B., & Trope, Y. (Eds.) (2012). *Dual-process theories of the social mind*. New York, NY: Guildford Press.

Silvera, D. H., Josephs, R. A., & Giesler, R. B. (2002). Bigger is better: The influence of physical size on aesthetic preference judgments. *Journal of Behavioural Decision Making*, 15(3), 189–202.

Smith, S. M., & Petty, R. E. (1995). Personality moderators of mood congruency effects on cognition: The role of self-esteem and negative mood regulation. *Journal of Personality and Social Psychology*, 68, 1092–1107.

Smith, S. M., & Shaffer, D. R. (1995). Speed of speech and persuasion: Evidence for multiple effects. *Personality and Social Psychology Bulletin*, 21, 1051–1060.

Snyder, M. (1974). Self-monitoring of expressive behaviour. *Journal of Personality and Social Psychology*, 30, 526–537.

Spassova, G., & Lee, A. Y. (2013). Looking into the future: A match between self-view and temporal distance. *Journal of Consumer Research*, 40(1), 159–171.

Staats, C. K., & Staats, A. W. (1957). Meaning established by classical conditioning. *Journal of Experimental Psychology*, 54, 74–80.

Syam, N., Krishnamurthy, P., & Hess, J. D. (2008). That's what I thought I wanted? Miswanting and regret for a standard good in a mass-customized world. *Marketing Science*, 27(3), 379–397.

Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, 33(1), 1–39.

Tangney, J. P., Baumeister, R. F., & Boone, A. L. (2004). High self-control predicts good adjustment, less pathology, better grades, and interpersonal success. *Journal of Personality*, 72(2), 271–324.

Tiedens, L. Z., & Linton, S. (2001). Judgment under emotional certainty and uncertainty: The effects of specific emotions on information processing. *Journal of Personality and Social Psychology*, 81(6), 973–988.

Wegener, D. T., & Petty, R. E. (1994). Mood management across affective states: The hedonic contingency hypothesis. *Journal of Personality and Social Psychology*, 66, 1034–1048.

Wegener, D. T., & Petty, R. E. (1995). Flexible correction processes in social judgment: The role of naive theories in corrections for perceived bias. *Journal of Personality and Social Psychology*, 68, 36–51.

Wegener, D. T., & Petty, R. E. (1997). The flexible correction model: The role of naive theories of bias in bias correction. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 29, pp. 141–208). San Diego, CA: Academic Press.

Wegener, D. T., Petty, R. E., & Klein, D. J. (1994). Effects of mood on high elaboration attitude change: The mediating role of likelihood judgments. *European Journal of Social Psychology*, 24, 25–44.

Wheeler, S. C., Petty, R. E., & Bizer, G. Y. (2005). Self-schema matching and attitude change: Situational and dispositional determinants of message elaboration. *Journal of Consumer Research*, 31, 787–797.

White, T. B., Zahay, D. L., Thorbjornsen, H., & Shavitt, S. (2008). Getting too personal: Reactance to highly personalized email solicitations. *Marketing Letters*, 19(1), 39–50.

Wilson, T. D., & Brekke, N. (1994). Mental contamination and mental correction: Unwanted influences on judgments and evaluations. *Psychological Bulletin*, 116, 117–142.

Wood, W., Rhodes, N., & Biek, M. (1995). Working knowledge and attitude strength: An information processing analysis. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Worth, L. T., & Mackie, D. M. (1987). Cognitive mediation of positive affect in persuasion. *Social Cognition*, 5, 76–94.

Wu, C., & Shaffer, D. R. (1987). Susceptibility to persuasive appeals as a function of source credibility and prior experience with the attitude object. *Journal of Personality and Social Psychology*, 52(4), 677.

Yalch, R. F., & Elmore-Yalch, R. (1984). The effect of numbers on the route to persuasion. *Journal of Consumer Research*, 522–527.

Yukl, G., & Falbe, C. M. (1991). Importance of different power sources in downward and lateral relations. *Journal of Applied Psychology*, 76(3), 416.

Zhang, Y., & Gelb, B. D. (1996). Matching advertising appeals to culture: The influence of products' use conditions. *Journal of Advertising*, 25(3), 29–46.

Ziegler, R. (2010). Mood, source characteristics, and message processing: A mood-congruent expectancies approach. *Journal of Experimental Social Psychology*, 46(5), 743–752.

Ziegler, R., Diehl, M., & Ruther, A. (2002). Multiple source characteristics and persuasion: Source inconsistency as a determinant of message scrutiny. *Personality and Social Psychology Bulletin*, 28(4), 496–508.