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DOI: 10.1177/1088868306294589

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The Epistemic–Teleologic Model of Deliberate Self-Persuasion

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Although past theory and research point to the importance of understanding deliberate self-persuasion (i.e., deliberate self-induced attitude change), there have been no empirical and theoretical efforts to model this process. This article proposes a new model to help understand the process, while comparing the process of deliberate self-persuasion with relevant theory and research. The core feature of this model is a distinction between epistemic processes, which involve attempting to form new valid attitudes, and teleologic processes, which involve self-induced attitude change but with minimal concerns for validity. The epistemic processes employ tactics of reinterpretation, reattribution, reintegration, retesting, changing comparators, and changing dimensions of comparison. The teleologic processes include suppression, preemption, distraction, and concentration. By mapping these processes, this model helps to generate many novel and testable hypotheses about the use of deliberate self-persuasion to cope with ambivalent attitudes.

Keywords: Self-persuasion; attitude change; persuasion; ambivalence; reasoning; suppression

I know of no more encouraging fact than the unquestionable ability of man to elevate his life by a conscious endeavor.

—Henry David Thoreau

People frequently find themselves possessing attitudes that are disconcerting and uncomfortable: Individuals with low self-esteem wish they could like themselves more; unhappy employees want to like their jobs; dissatisfied romantic partners want to feel more positively about each other; minority opinion holders in a committee may wish they held the same opinion as the committee; people in the pursuit of a healthy lifestyle try to lose their affection for junk foods; and fans of a relatively poor sports team sometimes wish they could avoid feeling bitterness toward the team after the constant dejection of losing. In these situations, people experience a high amount of conscious, internal conflict or ambivalence, because their attitude contains desirable as well as undesirable elements. People in these situations may hope that their job would become more fulfilling, their spouse would become more responsive to their needs, or their team would start winning. People may even take concrete steps to help bring such changes about. They might try talking to their boss, convincing their spouse to change, or cheering more vociferously for their team. Often, however, people find that none of their interventions work: They are stuck in their job, their spouse won’t change, and their team keeps losing. Thus, people may remain mired in situations that are reminders of their ambivalence.

According to cognitive dissonance theory (Festinger, 1957), this situation should elicit an aversive state of tension. Indeed, there is evidence that ambivalence toward ethnic groups in particular is associated with increased aversive arousal (Britt, Boniecki, Vescio, Biernat, & Brown, 1996; Hass, Katz, Rizzo, Bailey, & Moore, 1992). As a result, people are often motivated...
to resolve ambivalent attitudes in a positive or negative direction (Bell & Esses, 2002; I. Katz & Hass, 1988; MacDonald & Zanna, 1998) and more carefully process relevant persuasive information that can help them to achieve this aim (Jonas, Diehl, & Bromer, 1997; Maio, Bell, & Esses, 1996).

Nonetheless, such unbiased resolutions of attitudes in a positive or negative direction do not help people who have a preference for a specific nonambivalent attitude. For example, people know that they would rather like their job, their partner, and their favored sports team; their preference is to rid themselves of the undesired (negative) attitude elements rather than reduce their ambivalence in either direction. How can people cope with their ambivalence when they have a specific attitudinal preference? This situation is difficult because, in general, ambivalence occurs when the negative and positive dimensions of the attitude are coactivated from memory (Cacioppo, Gardner, & Berntson, 1997; M. M. Thompson, Zanna, & Griffin, 1995), and this coactivation makes it difficult to focus on one dimension to the exclusion of the other.

On occasion, people expect that they can escape this predicament with help from others, such as family, friends, religious authorities, or even psychologists. At other times, people may try diverse internal coping techniques without seeking external guidance. For example, people can consciously decide to hold in mind aspects of the job that they like, mentally elaborate on the ways in which the spouse is great, or contemplate the team’s admirable persistence in the face of repeated losses. Sometimes, people may even receive explicit cues to attempt these processes. For instance, one of the authors recently opened a fortune cookie containing relevant (yet unnecessary) advice, “Try to value useful qualities in one who loves you.” The advice was obviously directed at people who are experiencing at least some level of ambivalence in a close relationship. While heeding such advice, people are aware of their ambivalence and their attempts to deal with it, and if these efforts are successful, their attitude will become less ambivalent and more consistent with the preferred attitude.

Such covert, self-directed, intentional attitude change may be labeled deliberate self-persuasion, and this process is the focus of our article. To our knowledge, this article is the first to examine deliberate self-persuasion. Hence, it is useful to begin by giving a brief overview of the concept and of our model and then move quickly to a full description of the model. Next, we consider how it compares to several models in attitudes and social cognition that examine relevant but distinct processes (e.g., dissonance, self-control). Finally, we summarize some of the model’s features and several implications for further research.

OVERVIEW

Deliberate self-persuasion can occur only when people consciously recognize a discrepancy between how they actually evaluate aspects of an object and how they would like to evaluate it. If people are motivated and able to resolve this discrepancy, then they can employ a variety of covert mental strategies, and these strategies vary in how they balance the need to possess a correct attitude and the need to possess a desired attitude.

According to our model, some strategies simultaneously aim for the correct and desired attitude by using reasoning processes to alter mental representations of the object of judgment and the standard of comparison. These epistemic strategies include processes that reinterpret undesired attributes of the attitude object or that change the comparators of judgment.

Other strategies, however, are not constrained by the motive to be accurate. These tactics focus solely on the desired outcome and use mental control processes to simply raise the accessibility of desired feelings, beliefs, and behaviors or to inhibit the accessibility of undesired feelings, beliefs, and behaviors. There are several distinct ways in which people may manipulate this accessibility, and we label these strategies as teleologic tactics.

The pursuit of epistemic tactics does not rule out the use of teleologic tactics: People can alternately use epistemic and teleologic tactics in the deliberate pursuit of self-persuasion. Nonetheless, we expect that teleologic tactics will be preferred in circumstances that make the epistemic processes unnecessarily effortful (e.g., because exposure to the attitude object is fleeting), unimportant, threatening, or ineffective and when the teleologic strategy can be supported by the existing attitude structure and ego-control resources. Nonetheless, the epistemic processes may exert more powerful and long-term effects.

These aspects of our model are elaborated below. Our description begins by outlining the conditions that act as prerequisites to deliberate self-persuasion. Next, we describe our distinction between the epistemic and teleologic strategies. Finally, we describe factors that should predict which type of strategy is chosen and the probable outcomes of each strategy.

PREREQUISITES TO DELIBERATE SELF-PERSUASION

Self-Recognition of an Attitudinal Discrepancy

For deliberate self-persuasion to occur, people must consciously recognize a discrepancy between how they actually evaluate aspects of an object and how they would like to evaluate it.
A volitional process initiates deliberate self-persuasion. That is, there is some self-awareness of a gap between undesired attitudinal elements and desired attitudinal elements, which permits self-regulation toward reducing the gap.

Provocative support for a role of awareness was obtained in Murray and Holmes’s (1993; Murray & Holmes, 1999) investigations of the effects of experimentally induced concerns about partners’ faults on subsequent efforts to reorganize beliefs about the partner in a more positive manner, which is one of the routes to deliberate self-persuasion that we describe below. Not only did the experimentally induced concerns spontaneously increase these reorganization efforts, the induced concerns also led, first, to lower reported feelings of relationship closeness and satisfaction. Thus, the conscious perception of undesirable attitude elements existed prior to the use of the deliberate self-persuasion strategy.

More recently, Doria (2005) examined awareness of self-persuasion more directly and across more attitude objects. In her study, participants were given detailed descriptions of three scenarios that involved resisting temptation. These scenarios involved either resisting chocolate while on a diet, resisting social pressures to drink alcohol, or being attracted to an alternative romantic partner in an intimate setting. Participants chose a scenario that was closest to their own past experience and then answered using Likert-type scales assessing how they dealt with it. Responses to the items revealed that participants had experienced similar episodes in the past, were highly aware of “trying to persuade yourself to dislike” the tempting object, and felt that they were generally successful at this self-persuasion. Also of interest, the questionnaire asked participants whether they considered this self-persuasion to be a good or a bad thing, and the majority of participants (71.4%) chose “a good thing” over “a bad thing” (14.1%) and “don’t know” (14.1%). From these results, it was clear that participants were highly aware of their efforts to talk themselves into a more negative attitude toward the tempting object and felt justified in doing so.

Two additional hypotheses are relevant to this awareness prerequisite. First, as noted above, deliberate self-persuasion should occur only when the desired attitude is held as a personal goal, over and above any felt compunction from rules or from others. This emphasis on the personal goal is important because, if the personal goal is not formed, people can merely alter all outward demonstrations of their attitude, thereby meeting rules and other people’s wishes. Second, although deliberate self-persuasion involves a conscious and intended goal of attitude change, elements of this process can occur outside of awareness. The gap between the actual and desired attitudes may be bridged very quickly and nonconsciously by any routes to deliberate self-persuasion that have become highly practiced and automatic for the individual. This prediction is consistent with abundant theory and research demonstrating the automatization of psychological processes (Chartrand & Bargh, 1996). The gist of this prediction is that, despite being aware of the gap between their undesired and desired attitude elements, people may not be completely aware of every way in which they are moving toward their desired attitude.

**Ability and Motivation**

Deliberate self-persuasion processes occur when people are able and motivated to reduce the discrepancy between their actual and desired attitude elements.

Deliberate self-persuasion is not the only means of dealing with an attitudinal discrepancy. Just as people chronically experience discrepancies between how they actually see themselves and how they would like to be (Higgins & Spiegel, 2004), people may often decide to abide discrepancies between their current and desired attitudes toward other people, objects, and issues. Alternatively, extreme disillusionment may cause people to abandon the desired attitude altogether, as when individuals leave a relationship or revoke membership of a group that consistently fails to meet expectations. In some circumstances, the current attitude may become so salient and compelling that the previously desired attitude is changed to conform to the person’s current experience of reality. For example, Fletcher, Simpson, and Thomas (2000) found that satisfied couples in the early stages of a new romantic relationship changed their ideal standards for a partner to meet the attributes of their current partner. Consistent with numerous process models in research on social judgment and attitudes (e.g., Chen & Chaiken, 1999; Petty & Wegener, 1999; Sanbonmatsu & Fazio, 1990; E. P. Thompson, Kruglanski, & Spiegel, 2000), our second postulate asserts that the decision to pursue deliberate self-persuasion over these other options depends on the individual’s ability and motivation to achieve the desired attitude: People will accept an attitude discrepancy when they cannot change the discrepancy or are not highly motivated to change it.

The effects of ability on deliberate self-persuasion depend on the way in which ability is conceived, because people’s subjective perceptions of the ability to change their actual attitudes may differ from their objective ability to do so. People often have limited awareness of many of the factors that actually shape their attitudes (Nisbett
occurs. Deliberate self-persuasion processes should be highly competence at making the dissonance-inducing decision than when they were led to believe that they lacked the relevant expertise (Gerard, Blevans, & Malcolm, 1964). In other words, self-persuasion in this context was set in motion by participants’ high subjective ability to justify their decision, regardless of their actual ability. Nonetheless, attitude change also depended on the absence of distraction after making the choice (see also Ebbesen, Bowers, Phillips, & Snyder, 1975; Johnson, Maio, & Smith-McLallen, 2005; Zanna & Aziza, 1976).

The performance of deliberate self-persuasion should also depend on the motives that underlie the actual and the desired attitudes. Perhaps the most basic determinant of the motivation to pursue deliberate self-persuasion is whether people expect the attitude object itself to change. People possess many implicit theories about changes in themselves and others (Dweck & Legget, 1988; Ross & Wilson, 2000). If a person’s implicit theory about an object is that it will change positively in the future, the need for deliberate self-persuasion is eliminated because the discrepancy between the actual and desired attitudes will be reduced as the positive change occurs. Deliberate self-persuasion processes should ensue primarily when the individual expects no naturally occurring positive change to the attitude object and no future exposure to more desirable information about it.

In such cases, deliberate self-persuasion can be elicited by several motivations. Relevant motives are highlighted in theories of attitude function, which examine the psychological needs that attitudes fulfill (Maio & Olson, 2000). Among these needs are strivings to (a) hold attitudes that separate the things that hurt us from the things that help us, (b) preserve the self-concept, (c) enhance social relations with others, and (d) affirm personal values (D. Katz, 1960; M. B. Smith, Bruner, & White, 1956). Attitudes may be based on all of these motivations simultaneously or more on one type of motivation than on others. The role of each motive depends on the chronic (DeBono, 2000) and acute needs (Murray, Haddock, & Zanna, 1996) of the individual. When these chronic and acute needs support the desired attitude more than the actual attitude, deliberate self-persuasion should ensue. For example, relationship partners who have joint financial interests, strong family values, feelings of mutual esteem, and a public life in the community should be more motivated to retain their positive attitude toward each other than partners who have only joint financial interests (Rusbult & Van Lange, 1996).

TACTICS FOR DELIBERATE SELF-PERSUASION: EPISTEMIC VS. TELEOLOGIC STRATEGIES

Overview of the Strategies

Many theories of social cognition distinguish between two motives that guide reasoning processes: the motive to reach a correct conclusion and the motive to reach a desirable conclusion (Chaiken, Giner-Sorolla, & Chen, 1996; Kruglanski, 1989; Kunda & Oleson, 1995; Sorrentino & Higgins, 1986). Self-persuasion is not an issue when the only goal is accuracy, because accuracy does not imply a particular attitude a priori. Although people might occasionally feel that their current attitude is inadequate because it is based on dubious or insufficient information, their attempts at seeking more valid information would not guarantee arrival at a different attitude. The primary goal in such instances is the pursuit of an accurate attitude, per se, and not attitude change. Thus, the adoption of a more desirable net attitude as a personal goal is the unique ingredient in the processes of deliberate self-persuasion.

Nonetheless, an important issue is whether this goal is incompatible with the pursuit of an accurate attitude. Arguments concerning the predominance and effects of these two motivational sets have been endemic in psychology over the past few decades, in the literature on
self-appraisals, in particular (Colvin & Block, 1994; Fiske & Taylor, 1991), and relationship appraisals (Gagne & Lydon, 2004; Mussweiler, 2003). It is now clear that both motives can operate simultaneously and separately. For example, people appraise themselves, their relationships, and their future in a relatively even-handed and accurate manner when they are in situations that require a deliberative consideration of positive and negative aspects; yet after decisions are made, such impartiality is reduced as people focus on ways to implement and service their desired goals (Gagne & Lydon, 2001; Gollwitzer & Kinney, 1989). Prior theory and research have also indicated that people often pursue a desired conclusion while maintaining an "illusion of objectivity" (Kruglanski & Webster, 1996; Kunda & Oleson, 1995). That is, people seek a desired attitude, but not with the belief that this attitude will be wholly inaccurate.

Our model encompasses these simultaneous strivings for the correct and desired attitude and labels them as epistemic tactics. Epistemic judgments are influenced by mental representations of the object of judgment and the standard of comparison (Kahneman & Miller, 1986). They use reasoning processes to comprehend (a) the undesired attitude elements in some way that weakens their perceived validity or (b) the desired attitude elements in some way that strengthens their perceived validity. In other words, epistemic tactics attempt to understand the currently experienced reality in a way that promotes the more desirable net attitude. These tactics employ biased reasoning to achieve this aim and will push this reasoning as far as possible, until obvious mismatches with reality are detected.

People's attempts to support the desired attitude need not always be constrained by the motive to be accurate, however. Our second route to deliberate self-persuasion includes strivings for the desired attitude alone and labels them as teleologic tactics. Teleology refers to an emphasis on final causes or ultimate purposes. These tactics are focused solely on the desired outcome; they use mental control processes to bring about the desired attitude and avoid the undesired attitude elements, without any concern for the validity of the desired attitude. By mental control, we mean processes through which people try to increase accessibility of desired feelings, beliefs, and behaviors or inhibit the accessibility of undesired feelings, beliefs, and behaviors. According to Wegner (1994), mental control is "a paramount function of human consciousness, an ability we have that arises from our capacity to reflect on our own mental activities and influence their operation" (p. 35). With such control, we can successfully perform a variety of activities, such as studying new material, managing our moods, and restraining negative impulses (Wegner, 1994). Teleologic tactics attempt to implement a new reality altogether, based on the implicit assumption that a valid judgment is one that is psychologically and pragmatically useful (Swann, 1984); that is, the end justifies the means. Indeed, in one self-help guide to attitudes, motivation, and lifestyle change, this idea is stated explicitly: "The belief that becomes truth for me . . . is that which allows me the best use of my strength, the best means of putting my virtues into action" (Gide, cited in Robbins, 1991).

Another example of teleologic processes is provided within Gottman and Silver's (2000) best-selling book, The Seven Principles for Making Marriage Work. Drawing on their extensive research on married couples, Gottman and Silver suggest that most couples have gripe or complaints about each other and that the key difference between marriages that work and those that fail is whether the partners can draw on positive sentiments to outbalance the negative. These researchers outline several steps to help couples build and maintain their "love maps," which subsume the attitudes that partners have toward each other. As in many self-help books, the emphasis is not on helping partners derive an accurate appraisal of whether their relationship should succeed or fail; the emphasis is on building positive attitudes (love maps). People who undertake the steps within the book are explicitly striving to change their relationship attitudes from their current state to a more positive state. In contrast, an accuracy goal would require some openness to "hate maps," which are not proposed, nor would married partners find them attractive and useful. Other forms of clinical therapy, such as cognitive behavioral therapy, also rely directly on teleologic tactics (Beck, 1976; Ellis, 1969).

Extant dual-process models provide part of the rationale for this distinction between epistemic and teleologic processes. The introduction of a distinction between epistemic and teleologic strategies is consistent with extant dual-process distinctions between propositional and associative processes (see Smith & DeCoster, 2000, for a review). The epistemic processes focus on altering propositions, that is, assertions about the validity or invalidity of links between an object and various attributes (E. R. Smith & DeCoster, 2000; Strack & Deutsch, 2004). The aim is to reject undesired propositions and accept desired propositions. These propositions can have implications for spontaneous associations, which do not involve assertions of truth or falsehood but may nonetheless be desired (e.g., positive feelings toward a spouse) or undesired (e.g., negative feelings toward a spouse). Nonetheless, these associations are not the direct targets of the epistemic route; any effect on them is simply a by-product of propositional changes (e.g., creating an unfavorable belief can elicit negative emotional associations). In contrast, the telelogic processes focus on reducing the activation level of the
undesired propositions and associations linked to the attitude. In this route, all that matters is that undesired attitudinal elements of any type are kept from consciousness and that desired attitudinal elements are kept in consciousness; it does not prioritize assertions that imply claims of validity or invalidity.

Other aspects of our model are distinct from the extant dual-process approaches. In particular, the model may be unusual in its argument that both constructs are subjected to meta-cognitive control. Most extant dual-process models emphasize ways in which propositional processing is more effortful than associative processing (E. R. Smith & DeCoster, 2000). In contrast, the teleologic strategy focuses on a special case where people are “effortfully” attempting to activate or deactivate associations. This focus does not deny that associations typically become influential in an automatic, effortless fashion; it simply draws attention to a context wherein this effortlessness is disrupted, similar to the way that automatic motor sequences can be disrupted when people attempt to learn new motor habits (Wegner, Ansfeld, & Piloff, 1998). In fact, this difference is relevant to the frequent dual-process assumption that greater effort follows after motivations to be accurate or valid (see E. R. Smith & DeCoster, 2000, for a review). Conversely, our model assumes that a high degree of effort occurs both when validity concerns are prominent (epistemic route) and when they are not prominent (teleologic route).

In the text below, we describe tactics within each route and highlight evidence that helps to describe them. The model includes a variety of routes within each process, which are considered together for the first time.

**Epistemic Tactics**

One set of epistemic tactics attempts to reach a more desirable net attitude by changing the current mental representation of the object of judgment. People attempt to achieve this change by (a) reinterpreting undesired attributes of the object, (b) reintegrating undesired with desired attributes, (c) reattributing undesired attributes to unstable factors, and (d) retesting the validity of undesired attributes. Other epistemic tactics involve changing the standards for evaluating the object of judgment by (a) changing the comparators of judgment or (b) changing the dimensions on which the judgment is based.

To discover epistemic strategies, our theoretical starting point was that evaluations of an object depend on (a) perceptions of its attributes and their causal history and (b) comparisons of it with other objects. This assumption was derived from classic perspectives on social judgment. Heider’s balance theory indicates that attitudes are based on perceptions of the properties of the attitude objects and beliefs about the objects’ relations to the broader social context. This principle helped to spawn several major approaches to the study of social judgments, including dissonance theory (Festinger, 1957), attribution theory (Heider, 1958), and social comparison theory (Festinger, 1954). Across these theories, perceptions of the object can be changed by adding or subtracting attributes from it, and these additions and subtractions can be achieved either by adding new information (reintegration below), by reinterpreting the meaning of the attributes (reinterpretation below), or by explaining the attributes in a congenial way (retribution below). In addition, comparisons can be shaped by changing the object of comparison or the dimension on which the comparison is made. In our view, this scheme works well for most of the research that we have examined. However, one epistemic process—motivated hypothesis testing (below)—is unique and potentially relevant to all of the other tactics we expected (because people’s hypotheses could focus on and reinitiate any of them). Thus, this epistemic tactic was also added to our model.

There is abundant evidence relevant to understanding these tactics. This evidence illustrates how the tactics work, although not always in the context of deliberate self-persuasion. Below, we describe how these mechanisms may also be used in a deliberate manner (see also Table 1).

**Motivated interpretation.** People idiosyncratically interpret their own behaviors in ways that enable them to maintain a positive attitude toward the self (Dunning, Meyerowitz, & Holzberg, 1989). For example, people who like to visit museums alone are more likely to deny that this behavior is aloof than are people who would prefer to go with someone else (Dunning, Perie, & Story, 1991). In addition, people can interpret their relationships in ways that facilitate a positive conception of the self or the relationship (Cameron, Ross, & Holmes, 2002; Dunning et al., 1989). Similarly, Murray and Holmes (1993) found that seemingly negative partner...
attributes (e.g., argumentative) can be interpreted as positive characteristics (e.g., partner’s willingness to confront important issues), and this process may increase relationship positivity over time (Murray et al., 1996).

In addition, research has examined how reinterpretations can be employed to shape emotions (Gross, 1998). Specifically, people can change how they understand their emotional responses as a function of their situation. For example, athletes may attempt to cope with anxiety before an important competition by focusing on the competition’s potential to yield success, thereby helping to reinterpret arousal as excitement (Skinner & Brewer, 2004). In fact, Gross and John (2003) have predicted and found that people are aware of such conscious manipulation of emotion, because they can report chronic tendencies to engage in this reinterpretation process on self-report items (e.g., “When I want to feel less negative emotion, I change the way I’m thinking about the situation”). In theory, this same process can be used to change affective responses to attitude objects, above and beyond more diffuse emotional reactions.

Reinterpretation can even be applied in the context of very salient and strong stimuli. For example, although people with chronic or acute pain tend to attempt pain management by self-distraction (see below), they can also focus on the pain and reinterpret it in a way that makes it less threatening (Ehrenberg, Barnard, Kennedy, & Bloom, 2002; Spanos, Horton, & Chaves, 1975). This reinterpretation can involve a process of accurate reality testing, wherein people manage to recognize that the painful stimulus (e.g., a cold-pressor stimulus) is less self-threatening than it feels (Lazarus & Folkman, 1984). As a result, they can self-generate a more positive attitude toward the stimulus than they had beforehand.

The process of reinterpretation might be understood with reference to Fishbein and Ajzen’s (1975) description of how attitudes can change when people alter the perceived desirability and likelihood of consequences that they associate with the attitude object. A painful stimulus may be perceived as evoking a highly undesirable sensation, but after concentrating on and interpreting the symptoms, people can downplay the undesirability of the pain. For other stimuli, it may be easy to alter the likelihood with which a consequence will arise. For instance, people who want to give up fatty foods might attempt to exaggerate the likelihood that the foods will immediately “hit their waistline” or be visible as body fat. This type of exaggerated perception is a hallmark of various eating disorders (Fairburn, 1995; Polivy & Herman, 2000). Thus, reinterpretation may affect the perceived desirability and likelihood of attributes of the object, in addition to affecting the semantic meaning of these attributes.

Of course, it is not always possible to relabel undesired attributes without seeming grossly inaccurate. The undesired attribute may be patently obvious on occasion, and relabeling the attribute would be psychologically difficult. For instance, it may be difficult (and maladaptive) to label a spouse’s lasciviousness as evidence of gregariousness or to reinterpret a painful stimulus that is serious and life threatening (e.g., cardiac pains). In general, some attributes cannot be flexibly interpreted (Hayes & Dunning, 1997), and people must decide to pursue other routes to deliberate self-persuasion or to abandon this goal altogether.

**Motivated integration.** When it is not possible to reinterpret an attribute, it may still be possible to reconstrue the attribute by placing it in a broader context. As noted by Murray (1999), this process is akin to saying, “Yes, but...” In other words, the attribute is acknowledged but directly embedded among desired attributes that minimize the effect of the undesired attribute. Murray and Holmes (1993) described examples of this process in the context of intimate relationships. They asked couples to write narratives about the development of their relationships and about their partners’ greatest faults. The narratives revealed many serious personality faults, such as jealousy, inexpressivity, and immaturity. Yet these faults were recast by integrating them with virtues (e.g., caring).

Such integrative thinking has important consequences for views of the attitude object. In Murray and Holmes’s (1999) research, individuals who linked their partners’ greatest faults to virtues exhibited the strongest positive views of their partners and more stable relationships than did individuals who clustered the faults and virtues separately. In addition, Showers (1992) has found that people who link their own faults to virtues within a specific domain report higher levels of self-esteem in that domain, when negative information is relatively important or frequently accessed. Thus, benefits of an integrative self-structure occur when the negative self-aspects are central to the self.

Another interesting example of reintegrations comes from research examining persistence on boring tasks. Long ago, the famous fictional character of Mary Poppins instructed the children in her care to turn their chores into games by adding fun elements to them. It turns out that Mary Poppins’s advice was sage, because this addition of fun elements enables workers to derive more satisfaction from their jobs (Sansone, Weir, Harpster, & Morgan, 1992). In other words, coupling an undesired attitude toward a task with desired attributes can aid the formation of a more positive attitude toward the task and, as a consequence, facilitate persistence on the task. The Mary Poppins effect, and reintegrative in general, work by creating linkages to desired
attributes that color the perception of the undesired attributes (Asch & Zukier, 1984; Murray, 1999). As stated by Murray (1999), “stubbornness combined with caring may not be the same attribute as stubbornness combined with selfishness” (p. 29). The more highly integrated representations may also make the desired attributes accessible when the undesired attributes are primed (Showers & Kling, 1996). As a consequence, the effect of salient undesired attributes might be automatically muted when they are linked in memory to desired attributes. Moreover, as mentioned earlier, there is some evidence that people are aware of using this tactic (Murray & Holmes, 1993, 1999).

Motivated attribution. Undesired characteristics of the attitude object can be discounted by attributing them to another factor. Rather than using the “yes, but . . .” approach described above, this approach is akin to saying, “Yes, because . . . .” Sometimes the cited explanation can be a desired attribute. For example, Murray (1999) describes how some people attribute their romantic partner’s greatest faults to important virtues. For instance, one woman indicated that her partner’s jealousy revealed “how important my presence is in his life” (p. 28). People can also discount the flaws in attitude objects by finding evidence that the flaws are reflections of some temporary, extraneous causal factor. For example, a person who has just bought a car might attribute some mechanical breakdowns to bad luck or a missed tune-up, rather than accept that the car is a lemon. The general tendency to make such congenial causal attributions is well documented (Pollard, Anderson, Anderson, & Jennings, 1998; Reiss, Rosenfeld, Melburg, & Tedeschi, 1981).

More relevant, such congenial attributions can result from an extensive consideration of relevant information. According to several models of attributional processes, people spontaneously draw dispositional inferences from salient behavior, and people correct these automatic inferences only when they are sufficiently motivated and able to conduct a systematic consideration of relevant information (Gilbert, Tafarodi, & Malone, 1993; Trope & Alfieri, 1997). Thus, when undesired attributions occur, one way to “correct” them (i.e., make them more congenial to current motives) involves a more exhaustive consideration of the extent to which different people display the attribute in different situations across time (Hovland, Janis, & Kelley, 1953).

Motivated hypothesis testing. The desired attitude may be achieved when salient motivations inspire people to form and test particular hypotheses (Kunda & Oleson, 1995). For example, people who desire to see themselves as introverted should be likely to test the hypothesis that they are introverted. As described by Kunda and Oleson (1995), this motivated selection of hypotheses is important because people tend to test hypotheses by looking for evidence that supports them (Klayman & Ha, 1987). For example, people who have been motivated to see themselves as introverted are more likely to recall their introverted behaviors and less likely to recall their extroverted behaviors than are people who have been motivated to see themselves as extroverted (Sanitioso, Kunda, & Fong, 1990). People also tend to recall instances of an acquaintance’s introverted behaviors to test the hypothesis that the person is introverted, whereas people tend to recall instances of an acquaintance’s extroverted behaviors to test the hypothesis that the person is extroverted (Gordon, Baucom, & Snyder, 2000). This hypothesis confirmation process extends to actual social interactions: People who are interacting with a stranger tend to ask biased questions that help confirm their prior hypotheses about the stranger (Gordon et al., 2000). Thus, people gather evidence to support the hypotheses that they are motivated to form, which may help people to gain confidence in the validity of the hypothesis that they are testing (Kunda & Oleson, 1995). Not only did the participants report more happy responses and fewer unhappy responses when they were asked whether they were happy (as opposed to unhappy), the participants rated themselves as happier after responding to the question about happiness than after responding to the question about unhappiness. These results indicate that the leading questions affected evaluations of the object of judgment (i.e., one’s social life) by making hypothesis-confirming thoughts, feelings, and behaviors more accessible.

Changing the comparators of judgment. All of the above processes may alter mental representations of an attitude object relative to a salient standard of comparison. For example, when evaluating the reasons for poor performance on a test, students might construct attributions that explain their performance relative to a comparison that is salient in the situation (e.g., “I had less sleep before the exam than John Smith”). Their standards of comparison may range from being a close friend or an unknown group of people (e.g., Mensa members) to being simply the person himself or herself at another point in time. In situations where the salient standard of comparison elicits undesired elements of an attitude, the standard of comparison can be shifted to another person, group, or even the self at another point in time (Albert, 1977; Masters & Kiel, 1987). For example, to facilitate a positive self-view, people compare themselves with others who make them look good (Wills, 1981). Thus, failed students may choose to compare themselves to students who performed worse than they did (i.e., downward comparison). It is also possible
that they will choose to compare themselves with students who performed slightly better, as a means of self-improvement (i.e., upward comparison; Collins, 1996; Huguet, Dumais, Monteil, & Genestoux, 2001). Similarly, people in relationships can sustain positive attitudes toward their relationships by retrospectively perceiving improvement in them (i.e., backward comparison; Sprecher, 1999). These choices of comparison are often uniquely suited to salient goals.

Changes of comparators are also described within Tesser’s (1988) Self-Evaluation Maintenance (SEM) model, which illustrates how perceptions of relations with others can be used to maintain positive attitudes toward the self. In the SEM, people’s self-evaluations depend on judgments of their performance relative to others who may be close friends or distant acquaintances, and these judgments are formed for tasks that are relevant or irrelevant to self-conceptions. Tesser has predicted and found that people may alter the perceived closeness of others to maintain a positive self-evaluation: If a person performs worse than someone else on an important task, the person may diminish the sense of connection with the other individual to maintain self-esteem. This process is assumed to occur because the person is uncomfortable with the other individual as a standard of comparison, and increasing psychological distance may help make this comparison less salient.

Changing the dimensions of judgment. The SEM model also indicates that people can change the perceived self-relevance (or importance) of an attribute when other individuals possess higher levels of the attribute, in particular when the other individuals are psychologically close to the subjects (Tesser, 1988). Tesser and Paulhus (1983) tested this prediction by giving participants information that another participant had performed better or worse on a task assessing cognitive–perceptual integration. To manipulate the psychological closeness of the other individual, participants were given information that the other person was similar or dissimilar to themselves. Participants then completed self-report and behavioral measures of their belief in the importance of this ability. Results indicated that participants saw the task as less important when a similar participant performed better than when a dissimilar participant performed better, whereas participants saw the task as more important when a similar participant performed worse than when a dissimilar participant performed worse. Presumably, participants shifted their judgments of the relevance of this ability dimension to facilitate a positive attitude toward the self.

Early cognitive consistency theories are also consistent with this notion that people can shift standards of judgment to suit them (within accuracy constraints). Cognitive dissonance theory posited that people can reduce the perceived importance of conflicting cognitions, thereby reducing the dissonance arising from internal conflict, and several experiments have found that people can adroitly manipulate the perceived importance of conflicting elements (J. Aronson, Blanton, & Cooper, 1995; Simon, Greenberg, & Brehm, 1995). In addition, people support a positive self-view by valuing the positive qualities that they possess and devaluing the positive qualities that they lack (Frey & Stahlberg, 1987; Hill, Smith, & Lewicki, 1989; Kling, Ryff, & Essex, 1997), and they can sustain a positive view of their relationships by valuing the positive features of the relationship and devaluing the negative features (Neff & Karney, 2003). Similar processes are evident at a group level. To feel positively about the groups to which they belong, low-status group members may change the importance that they attach to dimensions of comparison between groups (Blanz, Mummendey, Mielke, & Klink, 1998; Mummendey, Klink, Mielke, Wenzel, & Blanz, 1999; H. J. Smith & Tyler, 1997). For example, East Germans are prone to devaluing the importance of the material resources dimension of their social identity, due to unflattering comparisons on this dimension with West Germans (Mummendey et al., 1999). The common feature of all of these processes is a flexible shift in dimensions used to compare between the focal attitude object (e.g., the self) and some other attitude object (e.g., friends).

Summary. There are at least six epistemic tactics available for downplaying undesired attitude elements and enhancing desired attitude elements. All of these processes are compatible with the epistemic need for validity. This compatibility is revealed by the fact that the processes are constrained by the available evidence (Kunda & Oleson, 1995). For example, people espouse desired views of themselves only to the extent that their prior self-knowledge furnishes enough evidence to support the desired views (Sanitioso et al., 1990; Steele, Spencer, & Lynch, 1993). People also retain some fear of invalidity during these processes. For instance, hypothesis testing is biased when comparing questions of similar diagnosticity, but people prefer diagnostic questions over nondiagnostic ones (Devine, Hirt, & Gehrke, 1990). The fear of invalidity should constrain the epistemic routes to deliberate self-persuasion because these routes all involve mustering desired evidence. People can persuade themselves only to the degree that the available evidence supports the desired point of view without seeming wholly inaccurate.

Teleologic Tactics

Teleologic tactics attempt to reach the desired attitude by one of four mental control processes: (a) suppression
of undesired attitude elements, (b) distraction from undesired attitude elements, (c) concentration on desired attitude elements, and (d) preemption of the loss of desired attitude elements.

The four teleologic routes that we propose integrate current models of regulatory focus (Carver & Scheier, 1998; Higgins & Spiegel, 2004) and ironic processes (Wegner, 1994; Wenzlaff & Wegner, 2000). The four teleologic routes are exhaustive of the possibilities conveyed by the extant models. In our description of these routes, we show how they yield a useful integration of both models.

Each of these routes may use two psychological mechanisms for achieving mental control: (a) an operating system to activate particular cognitions, emotions, or behaviors and (b) a monitoring system to detect the intrusion of other cognitions, emotions, or behaviors (Wegner, 1994). Each system is analogous to similar control systems that exist in the physical world. For example, an effective home heating system requires a component process that elicits heat (i.e., a burner/boiler) and a component process that monitors the actual heat obtained (i.e., a thermostat). Consistent with this view, our model suggests that the four teleologic routes vary according to their use of an operating and monitoring mechanism (see Table 2).

**Attitudinal suppression.** The effects of people’s conscious attempts to avoid activation of undesired attitude elements are revealed in research that has examined the effects of suppressing particular emotions, cognitions, and behaviors. Because emotions, cognitions, and behaviors are the basic building blocks of attitudes, suppressing undesired attitude elements requires an attempt to activate emotions, cognitions, and behaviors that are not part of the undesired attitude (a distracter), while monitoring for intrusions of emotions, cognitions, and behaviors that are undesired (the suppression target). We label these attempts as attitude suppression.

Some research on this process has examined the suppression of emotions in particular. For example, Wegner, Erber, and Zanakos (1993) asked participants to reminisce about a sad event or a happy event. Participants who were asked to think about a sad event were then asked to try not to be sad, were asked to try to be sad, or were given no additional instruction. Similarly, participants who were asked to think about a happy event were asked to try to be happy, were asked to try not to be happy, or were given no additional instruction. As expected, results indicated that participants who were asked to suppress a sad mood became less sad, whereas those who were asked to suppress a positive mood became less happy.

**TABLE 2: Components of the Teleologic Routes**

<table>
<thead>
<tr>
<th>Regulatory Goal</th>
<th>Operating</th>
<th>Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undesired elements out of awareness</td>
<td>distraction</td>
<td>suppression</td>
</tr>
<tr>
<td>Desired elements in awareness</td>
<td>concentration</td>
<td>preemption</td>
</tr>
</tbody>
</table>

It is important, however, that this experiment included a condition that asked participants to perform an irrelevant cognitive task (e.g., rehearsing a number sequence) while attempting to control their emotions. Participants in this condition were unsuccessful at controlling their emotions: Those who were asked to suppress a sad mood subsequently became sadder, whereas those who were asked to suppress a positive mood subsequently became happier. Similar ironic effects have been obtained in studies of people’s attempts to control their beliefs and behavioral impulses (Czopp, Monteith, Zimmerman, & Lynam, 2004; Wegner et al., 1998; Wenzlaff & Wegner, 2000). When cognitive resources are consumed, people find it difficult to avoid specific feelings, beliefs, and behaviors. Instead, people simply become more aware of them.

By implication, suppression may often be only an effective stopgap or short-term strategy. However, it is worth noting that resources may often be sustained over time, and other real-life contexts can ensure that post-suppression rebound is not inevitable (Czopp et al., 2004). For example, Simpson, Ickes, and Blackstone (1995) created an experimental setting in which dating couples experienced differing levels of threat to their relationship. They found that when individuals viewed their relationship as close but insecure and threatened by the situation, they seemingly tried to protect themselves by avoiding or otherwise failing to attend to their partner’s true feelings of attraction to potential alternative partners (i.e., suppressing elements of the undesired attitudes). Furthermore, all of the highly threatened/low accuracy couples were still dating 4 months later, whereas 28% of the remaining couples in the sample had broken up. These findings suggest that such suppression may occur over time and be an effective strategy.

Moreover, there is ample precedent for believing that the use of suppression can be quite deliberate and purposeful. For example, researchers examining emotion regulation have assumed that people can be highly aware of their motivated use of suppression. This assumption led Gross and John (2003) to develop self-report items to measure individual differences in attempts to suppress undesired emotions, in addition to aforementioned items to measure attempts at reinterpreting the context of an emotion. For example, one item for assessing emotion suppression indicates, “When I am feeling negative
emotion, I make sure not to express them.” These self-reports exhibited predictive validity; as these investigators expected, people who report high use of this strategy tend to hold negative views of others and are less liked by them. Thus, self-driven suppression does not always have positive consequences; when it involves suppression of emotional communication with peers, it might actually prevent positive social interactions.

**Attitudinal distraction.** People may avoid any activities that elicit the current, undesired attitude elements, and they can do so by occupying their mind with irrelevant goals, thoughts, behaviors, or stimuli. Numerous colloquial expressions refer to the general process, such as “I want to take my mind off things” or “I need to get away for a while.” We label these attempts as attitudinal distraction.

Yet as with attitudinal suppression, attitudinal distraction requires an attempt to avoid cognitions, emotions, or behaviors that are not part of the undesired attitude, while monitoring for intrusions of cognitions, emotions, or behaviors that are undesired. Nonetheless, suppression and distraction differ in their focus on the operating versus monitoring processes. In the suppression route, people primarily exercise vigilance against the undesired attitude elements, while also pursuing content irrelevant to the undesired attitude elements. In distraction, however, primary effort is focused on occupying the mind with material that is irrelevant to the undesired attitude elements, while less energy is devoted to vigilance against intrusions of the undesired attitude elements (see Table 2).

Evidence indicates that even nursery school children appear capable of using distraction to lower the activation of undesired attitude elements: They resist temptation and delay gratification longer when they use overt or covert distractions to stop thinking about the attractive object (e.g., Mischel, Ebbesen, & Raskoff-Zeiss, 1972). In theory, this approach should work as long as, to the distraction is maintained, and potentially longer. If the distraction lasts long enough for the undesired elements of the current attitude to fade, then the desired attitude elements can be reasserted more easily. This fading process can occur through natural decay in recall of cognitions and behaviors that contribute to the attitude and the natural ebbing of relevant emotions (e.g., A. E. Wilson, Smith, Ross, & Ross, 2004). After this ebbing has taken place, elements of the desired attitude elements might potentially be reasserted through other teleologic or epistemic routes.

**Attitudinal concentration.** The above teleologic tactics focus on avoiding elements of the undesired attitude, but people can instead choose to focus on elements of the desired attitude. That is, people may specifically seek thoughts, feelings, and behaviors that support the more desirable attitude, and attitudinal concentration is a useful label for this process. Approach of desired attitude elements is different from avoidance of the undesired attitude elements because these mechanisms for deliberate self-persuasion differ in the content of the operation versus monitoring processes. As described above, the suppression and distraction routes devote different amounts of effort to the pursuit of thoughts, feelings, and behaviors that are irrelevant to the undesired attitude elements and vigilance against the undesired attitude elements. In contrast, the concentration route involves the pursuit of the desired attitude elements and vigilance against intrusions of thoughts, feelings, and behaviors that are irrelevant to the desired attitude elements. This difference in content is important because the elements that are subsumed in the desired attitude should be narrower in scope than the variety of thoughts, feelings, and behaviors that are irrelevant to the undesired attitude. Thus, the use of the operating process to focus on elements of the desired attitude (i.e., a feature-positive search) in the concentration route should be simpler and easier than the use of the operating process to focus on irrelevant elements (i.e., a feature-negative search) in the suppression route.

This concentration process is easily applied to achieve deliberate self-persuasion. Self-help volumes are replete with tasks that help people to retrieve and elaborate information that supports their desired (usually positive) attitudes toward themselves, their lives, or their partners (Gottman & Silver, 2000; Robbins, 1991). Note that this process is different from the epistemic strategy of biased hypothesis testing. In motivated hypothesis testing, the aim is to answer a question: Are there feelings, beliefs, or behaviors that support a desired attitude? In the teleologic strategy of attitudinal concentration, the aim is to bring to mind feelings, beliefs, or behaviors that support a desired attitude because of their utility—no question is posed and the retrieved elements are not compared with oppositely valenced elements.

There is ample evidence that people spontaneously retrieve and elaborate information that is congenial to their motives, and this process may often reflect the teleologic process of attitudinal concentration. For example, people recall positive feedback or self-aspects that may elevate their current self-esteem and mood (Boden & Baumeister, 1997; McFarland & Buehler, 1997). In addition, people seize an opportunity to elaborate their values following a self-esteem threat, presumably to reaffirm their self-esteem (Tesser, Crepaz, Beach, Cornell, & Collins, 2000). Furthermore, people selectively expose themselves to new information that supports their prior decisions, provided that the decisions are nonreversible.
and that new dissonant information is not useful and nonrefutable (Frey, 1986; Jonas et al., 1997). The evidence of selective exposure to new information supports the notion that people concentrate on information supporting a desired attitude when (a) it is useful to do so and (b) questions of attitudinal validity have become irrelevant (e.g., because of decision irreversibility).

More important, there is also evidence that sustained mental rehearsal of information can bring about changes in attitude. For example, some research has used tasks that elicit counterstereotypic mental imagery as a means of reducing prejudice on measures that tap automatic stereotyping (Blair, Ma, & Lenton, 2001). The imagery tasks appear to function by strengthening new connections with the desired, but relatively inaccessible, counterstereotypic attitudinal elements (Blair et al., 2001). Direct training in stereotype negation has a similar effect (Kawakami, Dovidio, Moll, Hermsen, & Russin, 2000). From our perspective, mental imagery and stereotype negation training both focus simply on increasing the simple activation of particular information, without effortful attempts to understand the meaning of the information. We also suspect that both methods can potentially be self-directed, although this speculation remains an issue for further research.

**Attitudinal preemption.** Some thoughts, feelings, or behaviors may be avoided because they lead to the absence of the desired attitude, and this process can be labeled attitudinal preemption. Preemption differs from the previously described strategy of concentration in its focus on the operation versus monitoring processes. The concentration route devotes effort primarily to the pursuit of the desired attitude elements, while also exhibiting low vigilance against content that is not desired. In preemption, however, primary effort is focused on being vigilant against intrusions of material that is not part of the desired attitude, whereas less energy is devoted to occupying the mind with the desired attitude elements.

In the domain of close relationships, partners proactively employ a range of overt and covert tactics that consciously or unconsciously help them to avoid or minimize potential threats that, if left unaltered, could destabilize the relationship (Hovland, Harvey, & Sherif, 1957; Simpson, Ickes, & Orina, 2001). Such preemptive relationship maintenance acts as a veritable “first line of defense” that perceivers can use to avoid the erosion of the desired attitude. For example, Miller (1997) found that satisfied partners in a relationship are unlikely to think about and look at attractive alternative partners. Presumably, satisfied couples worry that merely looking at an attractive alternative partner may lead to feelings of attraction that could have a detrimental effect on feelings about one’s current partner. Notice that the positive thoughts, feelings, and behaviors toward someone else may be seen as reducing positivity toward one’s current partner but not necessarily as leading to negativity. Potential negative outcomes may not be salient for satisfied couples; they may simply be concerned about creating a less positive state for their relationship. Thus, this avoidance of a challenge to the desired attitude involves some degree of vigilance, but it is different from the simple avoidance or suppression of an undesired attitude element.

**Summary.** We have outlined four teleologic routes for moving from an ambivalent attitude to a more desirable net attitude. As shown in Table 2, the strategies possess distinct goal orientations and distinct methods. People who strive to keep specific, undesired attitude elements outside awareness can do so by suppression of them or by achieving distraction from them. Alternatively, people who strive to keep desired attitude elements in awareness can do so by concentrating on them or by preempting their absence (i.e., by being vigilant against any but the desired elements). In both pairs of routes, one route focuses on operating processes that maintain sought-after information in awareness (distraction, concentration), whereas the other route focuses more energy on monitoring processes that guard against information that is not sought in consciousness (suppression, preemption).

All of these processes attempt to maintain the accessibility of particular content as an end in itself. Unlike epistemic processes, the teleologic processes do not check the validity of the sought-after attitude, because there is no concern about potential inaccuracy. For example, a person who is stuck in an undesirable job might attempt to keep the good aspects of his or her job in awareness because they are reassuring but not because they are definitive evidence. Similarly, a person might attempt to keep negative facts about his or her job outside of awareness because they are disconcerting and interfere with functioning but not because the facts are faulty or inaccurate. In contrast, epistemic processes require that people are wary of obvious invalidity and use reasoning processes to assuage concerns about invalidity.

**Comparing the Strategies.**

As shown in Table 3, the differences between these two routes are varied. First, as described above, the use of mental control tactics can be functionally independent of any need to achieve epistemic validity. For example, although it is likely that people who engage in stereotype inhibition or activation occasionally believe that they are being objective, the inhibition or activation of stereotypes can be elicited by task demands (e.g., direct instruction to inhibit) that have nothing to do...
with epistemic validity (Macrae, Bodenhausen, Milne, & Jetten, 1994). Similarly, there is evidence that children devalue forbidden toys as a means of mental control (to resist temptation), contrary to assumptions that this devaluation occurs because of dissonance reduction (Ebbesen et al., 1975). Such uses of mental control are reflected in classic distinctions between realist and pragmatic approaches to social judgment: Adherents to the realist approach maintain that an objective truth exists but can only be perceived via multiple cues that possess uncertain validity; pragmatists define accuracy in terms of the successful completion of the desired goal (Funder, 1995; Swann, 1984).

The difference between the epistemic and teleologic approach is akin to two ways of negotiating an accord between warring parties. One method attempts to get the parties to understand each other positively (see Table 3). A second method focuses on setting a basis for the future, rather than explaining the past, by asking them to “bury the hatchet” and focus on how they can coexist peacefully in the future. The goal of moving from an ambivalent attitude to a more desirable attitude is central to both strategies, but they move toward it in different ways: People may use reasoning to discount the undesired attitude elements and validate their desired attitude elements, or they may try to put the undesired attitude elements out of mind, while rehearsing and acting out their desired attitude elements.

Both strategies require effort, but the epistemic strategy is infused or somewhat constrained by an attempt to understand reality (albeit in a biased manner), whereas the teleological strategy simply attempts to manipulate the accessibility of relevant thoughts and feelings. In both processes, there is a meta-awareness of the need to change the person’s attitude and the bias that this need creates, but only the epistemic processes retain a simultaneous check with reality. A pithy example of this willing pursuit of bias and truth is the anecdote about two women who notice a very attractive woman walk past them and then laughingly quip, “fat ankles.” This presumably makes them feel better; they know it’s a biased comment, and they feel no remorse about responding this way. In other words, they deliberately shape the comparison with the full realization (and hope) that it will make them feel better. The epistemic strategy attempts to change the organization and meaning of attitude elements in a similar way. In contrast, the teleologic strategy merely attempts to strengthen the activation and chronic accessibility of the elements of the desired attitude (e.g., by trying to ignore the woman’s presence altogether). In essence, then, the epistemic strategy attempts to recomprehend elements in the undesired attitude, whereas the teleologic strategy simply tries to reduce the accessibility of these elements and potentially increase the accessibility of elements of the desired attitude.

This distinction between epistemic and teleological strategies encourages researchers to consider that pragmatic, association-focused thinking is a potential means of achieving deliberate self-persuasion. Previously, researchers have assumed the existence of epistemic processes in self-persuasion, without recognizing the potential for people to strive (with great effort) to alter the level of activation of their undesired and desired attitudinal elements. By juxtaposing the epistemic and teleologic routes, we can achieve a more complete picture of how people perform deliberate self-persuasion.

**DETERMINANTS OF STRATEGY**

**Choosing Between the Epistemic and Teleologic Tactics**

People who undertake deliberate self-persuasion may alternately use epistemic and teleologic tactics, but teleologic tactics will be preferred when (a) exposure to the attitude object and the undesired elements of the attitude is fleeting, (b) people believe that epistemic processes may be unimportant, too threatening to the self, or ineffective, and (c) the teleologic strategy can be supported by the existing attitude structure and ego-control resources.

In general, people should prefer to begin deliberate self-persuasion with epistemic strategies because this approach strategy simultaneously satisfies the goals of achieving a desired as well as an accurate attitude, rather than simply achieving either goal alone. Thus, the teleologic route becomes more feasible primarily when the epistemic route fails to yield the desired outcome. Nonetheless, several additional factors should influence the choice between epistemic and teleologic tactics.

*People should move toward the teleologic route when they face only fleeting exposure to the attitude object.* In this context, the epistemic processes entail an unnecessary degree of effort and some added risk. The effort is unnecessary because it should be easier to employ a temporary
shift in attentional focus (i.e., teleologic route) than to deliberately “unpack” and re-form their attitudes. In addition, this unpacking entails added risk because it may inadvertently yield information that is noncongenial to the desired attitude, whereas the temporary shift in attentional focus would not risk this exposure.

People should use the teleologic route when epistemic validity seems unimportant. Epistemic questions may appear unimportant when there are no objective criteria for the questions of evaluation. Indeed, many problems of evaluation can appear intractable because answers to global evaluative questions (e.g., “Is my partner worth loving anymore?”) can depend on the chosen comparators and dimensions of comparison, and people can manipulate these factors endlessly. Situational factors and individual differences can influence whether people perceive this difficulty and give up on the idea of validity altogether, endorsing the notion that the correct answer is whatever is right or useful for them (i.e., whatever feels good or desirable). For example, after reading a book about philosophical problems with the value of art, people might experience heightened awareness of problems finding objective criteria for favoring some pieces of art over other pieces. A person might wish to share his or her romantic partner’s positive attitude toward an abstract painting but know that it is impossible to draw on logical, verifiable arguments to support one attitude or another—all that matters is that the desired attitude is held. Furthermore, individuals may not care as deeply about epistemic validity when they are low in personality dimensions that predict thoughtfulness and the systematic scrutiny of information, such as conscientiousness (McCrae & Costa, 2003), need for cognition (Cacioppo, Perry, Feinstein, & Jarvis, 1996), need for closure (Kruglanski & Webster, 1996), or the desire to ensure optimal judgment quality (Kruglanski et al., 2000). In these instances, people can choose to attain the desired attitude through any of the teleologic routes, without attempting to unpack and recreate their attitude.

People should move toward the teleologic route when epistemic processes potentially threaten the self-concept. Experiments testing Sedikides and Green’s (2000) inconsistency–negativity neglect model are consistent with this hypothesis. In these experiments, participants showed little evidence of detailed processing of trait stimuli that were self-threatening; instead, there was evidence that the self-threatening trait information was kept from active attention (similar to our teleologic route of suppression; see below). In theory, this self-threat should be elicited in situations that provide negative feedback about the self or by chronically low self-esteem (Sedikides & Strube, 1997; Steele, 1988). We expect that such situations’ effects on self-threat should act to inhibit epistemic deliberate self-persuasion.

People will be more likely to use the teleologic route when they possess higher levels of ego-control ability. Deliberate self-persuasion can work only if people possess sufficient self-control reserves. Several studies indicate that self-control processes tap a reserve of energy that helps people to overcome a dominant response in favor of an alternate response (Baumeister & Heatherton, 1996). Presumably, this energy is required because self-control requires sustained attention on the task; once this attention has lapsed, habitual responses take over (Baumeister & Heatherton, 1996). The epistemic routes need sustained attention until the chosen routes have managed to embed new content into the attitude, whereas the teleologic routes need sustained attention at many points in time. Initially, they can help drive the undesired content from awareness, but this attitude content might reemerge later. Such reemergence must again be met with sufficient use of a teleologic route. Factors such as distraction and an inability to delay gratification, which is positively related to self-control abilities (Funder, Block, & Block, 1983), may interfere with people’s attention to and deployment of these routes and cause the routes to fail (Wegner, 1994).

OUTCOMES OF DELIBERATE SELF-PERSUASION

Epistemic deliberate self-persuasion should affect attitude scores on explicit and implicit measures of attitude. Teleologic deliberate self-persuasion should affect explicit measures, but its effect on implicit measures should depend on the extent that these measures are tapping only the evaluative associations in long-term memory.

The process of deliberate self-persuasion may take little time or a long time. In situations where deliberate self-persuasion is relatively easy to accomplish, the undesired attitude elements will gradually be supplanted by the desired attitude elements or at least made less accessible from memory. In other situations, the undesired attitude elements may be activated frequently and people may experience little success at replacing them. For example, prejudice reduction has been conceptualized as a gradual, rather than all or none, process (Devine, 1989; Devine & Monteith, 1999). This process may be gradual because people often encounter situations that reactivate the prejudice (e.g., stereotypic media coverage, disparaging humor).

Some outcomes should differ for epistemic and teleologic processes. Independent of the time used for deliberate self-persuasion, success at implementing epistemic

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processes should often be evident in both explicit and implicit measures of attitudes. Explicit measures assess attitudes using self-report scales, whereas implicit measures assess attitudes without relying on participants’ introspective access of their attitudes (Fazio & Olson, 2003). After epistemic deliberate self-persuasion, parallel change should occur because the desired attitude elements are consistent with conscious desires, thereby permitting their expression at the explicit level. If these desired attitude elements are also acceptable to others in general, explicit measures of attitude should detect the attitude (Fazio & Olson, 2003). The desired attitude should also be evident in implicit measures of attitude, because the epistemic processes involve mental changes that should affect the long-term mental representation of the attitude object and its undesired and desired elements. Thus, although some amount of explicit–implicit discrepancy may occur after deliberate self-persuasion (cf. Gawronski & Strack, 2004), epistemic self-persuasion should tend to exert parallel change in attitudes that are measured explicitly and implicitly.

In contrast, teleologic processes involve changing the relative accessibility of the undesired and desired attitude elements. These processes should move the undesired elements to a lower level of accessibility and cause them to be less evident in explicit measures of attitude. Nonetheless, the elements should be detectable by measures that tap their presence in long-term memory. In other words, the teleologic processes should lead to the kind of self-deception envisaged by Sackheim and Gur (1979), resulting in divergent attitude elements at nonconscious and conscious levels (A. E. Wilson et al., 2004). After repeated and successful attempts at this differentiated storage, conscious attempts at deliberate self-persuasion should cease, but the discrepancy in content at conscious and nonconscious levels should remain. Nonetheless, it is not yet clear that any particular implicit measure taps this long-term memory store and not recent, short-term interventions (Blair, 2002; Ferguson & Bargh, 2004). If an implicit measure were to tap only the long-term memory store, then teleologic deliberate self-persuasion should have less of an effect on it.

An important outcome of both routes to self-persuasion is a reduction in feelings of ambivalence toward the attitude object. As the undesired attitude elements are replaced by desired ones, the conflict within the individual’s attitude decreases, resulting in lower feelings of ambivalence. This effect is important because ambivalence has its own important consequences. For example, people who are highly ambivalent toward an object are more strongly influenced by features of their environment that make salient its positive or negative attributes, causing them to behave much more favorably toward it when the positive elements are salient than when the negative elements are salient; nonambivalent people are less strongly influenced by the acute salience of the positive or negative attributes (Bell & Esses, 2002; I. Katz & Hass, 1988; MacDonald & Zanna, 1998). In theory, then, successful deliberate self-persuasion should cause attitudes to become more stable across contexts.

Of course, attempts at deliberate self-persuasion could fail altogether. This outcome will depend on the precursors described above (e.g., ability and motivation). In this event, the person’s attitude should appear unchanged using implicit and explicit measures, as the individual grows to accept the current attitude rather than fight it. A person may then accept the current attitude as unchangeable and adapt in other ways. In particular, people may transfer the motivational goals that are the basis of the desired attitude to other attitude objects. This process could occur in any situation where the attitude object has been linked with an extreme undesirable attribute. For example, a switch in motivational goals may occur while trying to forgive a romantic partner who has had an affair. The victim may have tried to restore a positive attitude toward the partner because the victim has a strong need for romantic affiliation. If the attempts at deliberate self-persuasion are unsuccessful at fulfilling this need, the victim may accept the new negative attitude and resolve to channel the need for romantic affiliation elsewhere (i.e., “rebound” to someone else who fulfills this need). Thus, the motivation that drove deliberate self-persuasion can be transferred to another target, thereby fulfilling the motive in a different way.

### RELEVANCE TO OTHER RESEARCH ON ATTITUDES AND SOCIAL COGNITION

Our description of the model helps to lay the foundation for describing ways in which deliberate self-persuasion is relevant to and distinct from research examining the broader notion of self-persuasion, self-regulation, and motivated social cognition. First, research on the traditional notion of self-persuasion has focused on the manner in which behaviors can shape attitudes. This emphasis began with classic experiments on the effects of role-playing. These experiments found that self-derived arguments in support of a role-play caused attitudes to change in the direction of the arguments (Janis, 1954; King & Janis, 1956), even 18 months after the role-play (Janis & Mann, 1965). There is a variety of theories that can help to explain such effects. One of the more prominent explanations is provided by dissonance theory (Festinger, 1957), which proposes that people are motivated to form attitudes that are consistent with their past actions, because inconsistency elicits an aversive internal arousal
Deliberate self-persuasion is also unique from models of self-control and self-regulation. Some research on self-control focuses on situations wherein a cool, cognitive response to the object of temptation is in competition with the more attractive, hot, affective properties of it. For example, a person might have a cognitive representation of the properties of chocolate (e.g., sweet, fattening) and an affective representation (e.g., craving, desire). Metcalfe and Mischel’s (1999) model of self-control describes how people can deal with this conflict by overtly or covertly reducing the salience of the hot aspects, and this is achieved through suppression and distraction mechanisms that are similar to ones we describe above. They also describe a mechanism that deals with this conflict by altering the salient meaning of the stimulus, similar to an approach that we describe above (i.e., our epistemic route). However, the key difference between this model and the pursuit of deliberate self-persuasion is that the notion of self-persuasion focuses on conflict between positive and negative elements of attitudes, which explicitly include both the cool, cognitive, and hot, affective systems (Eagly & Chaiken, 1993; Zanna & Rempel, 1988). For example, a person may wish to form more favorable cognitions and feelings about his or her partner while trying to forgive the person for having had an extramarital affair, rather than merely try to subdue the affective system with the cognitive one. Thus, the Metcalfe–Mischel model focuses on a specific, special type of evaluative discrepancy (affective versus cognitive), whereas our model deals with any type of evaluative discrepancy. In addition, our model elaborates on a few additional ways to achieve this alteration through shifts in attentional focus (in teleologic routes) and numerous ways to achieve this transformation through changes in semantic representation of an attitude (in epistemic routes).

This focus on movement from undesired (cognitive and affective) attitude elements to a more desired net attitude is relevant to other research on self-regulation. One relevant topic is illustrated by the fact that movement toward the desired attitude is something that people desire of their own accord. This emphasis on the self-chosen nature of the desired attitude is relevant to a distinction proposed by Higgins (1987; Higgins & Spiegel, 2004) to understand self-regulation in general. Specifically, Higgins distinguishes between standards that are adopted from a personal point of view and those that are adopted from the standpoint of others (see also Czopp et al., 2004). He also indicates that a self-guide can reflect a personal ideal, desire, or wish (i.e., an ideal self-guide) or a personal sense of obligation or duty (i.e., an ought self-guide). In our model, the desired attitude is held as a personal ideal.

Perhaps the most relevant model of self-regulation is Baumeister and Newman’s (1994) elegant description of how people often attempt to reach specific, preordained conclusions, in a manner similar to our emphasis on people’s attempts to move to a more desired attitude:

When a particular conclusion is preferred, the conclusion (rather than the process) guides the self-regulatory efforts, and one monitors the process by repeatedly checking implications of incoming evidence against the preferred outcome. The goal is to marshal the best available evidence for the preferred conclusion, or against the unwanted conclusion. The idealized model of the lawyer may serve as a model for this sort of reasoning, insofar as lawyers seek to build the best possible case for their client, irrespective of the client’s objective innocence or guilt. We suggest that the research literature (which is
after all, created by scientists), may have exaggerated the image of scientist relative to lawyer as an integrative, heuristic image for human information processing. To be sure, researchers have documented many specific patterns in which people do bias or distort the evidence in favour of preferred conclusions, but the theoretical literature has not articulated any broad vision of the human information processor as guided by preset conclusions, in contrast to the intuitive scientist model. In everyday life, however, people's actual decisions and inferences may often involve trying to make the best case for a preordained conclusion. (p. 5)

Baumeister and Newman's model focuses on three processes used to obtain a preordained conclusion: controlled overriding of unacceptable conclusions, selective criticism of unwelcome evidence, and the setting of criteria to emphasize desired evidence. As we have shown, our model encompasses these processes, while describing many others (e.g., reattribution, concentration). Our model also makes a novel distinction between epistemic and teleologic processes.

A more basic difference between Baumeister and Newman's (1994) approach and our model is that the process of deliberate self-persuasion begins with a different level of conscious awareness. At the outset of deliberate self-persuasion, people are aware of undesired and desired elements of their attitude. Consistent with this assumption, people are more likely to report feelings of ambivalence when the negative and positive elements of their attitude are easy to retrieve simultaneously (Newby-Clark, McGregor, & Zanna, 2002). In contrast, Baumeister and Newman explicitly focus on a process that involves the avoidance of conscious awareness, stating that "it may not be desirable to be fully deliberate, conscious, and explicit about one's self-regulatory processes." (p. 5). Their emphasis is similar to Gur and Sackeim's (1979) description of self-deception processes. These researchers obtained evidence that people can simultaneously hold conflicting beliefs, with desired beliefs held at a different level of awareness than the undesired beliefs. In essence, then, people can maintain undesired and desired elements of attitudes at different levels of conscious awareness. This process creates something akin to the "dual attitudes" proposed by Wilson, Lindsey, and Schooler (2000). In the dual attitudes model, people can hold an undesired attitude at a nonconscious level, whereas a desired attitude is stored at a conscious level.

As noted above, our model does not attempt to examine the reconciliation of attitude elements that are stored at different levels of awareness. Instead, we focus on a context wherein people are initially aware of conflicting attitudinal elements. In this context, people possess a conscious feeling of ambivalence and intend to move from possession and endorsement of the undesired elements to the desired elements. Over time, people may manage to separate the undesired and desired attitudinal elements or to force the undesired elements to a lower level of awareness, but as described in our model, this is only one potential outcome of the deliberate self-persuasion process and not the starting point.

This emphasis on conscious discrepancies (i.e., felt ambivalence) also distinguishes deliberate self-persuasion from general research on motivated social cognition. This research has yielded consistent evidence that people form beliefs and judgments congenial to their motives (Kunda & Oleson, 1995; Newman, 1999). In most (but not all) social cognition paradigms, people's judgments of the self or some other entity (e.g., the efficacy of toothbrushing, a relationship partner) are changed by manipulations that alter salient motivations, but it is not clear whether participants initially recognize that they are in possession of an undesired attitude and then consciously seek to change it (Manstead & Fischer, 2000).

**SUMMARY**

We have pointed out the need for theories of when, why, and how people perform deliberate self-persuasion. Our model is intended to serve as a guide to some testable distinctions among the diverse routes to deliberate self-persuasion, helping to elucidate important differences between the routes, possible determinants of choices between them, and effects of the routes. Moreover, the model attempts to describe and address these issues in a manner that is applicable across multiple domains of investigation. Indeed, our examples have pertained to the self, spousal relationships, decision making, coping with emotions, painful stimuli, task persistence, personality traits, judgments of well-being, social groups, employment, sports teams, unhealthy foods, addictive behaviors, and even toys. The applicability to diverse objects helps to form novel predictions for a range of psychological issues (e.g., forgiveness, coping with addiction, prejudice) across subdisciplines in psychology and to stimulate research looking at common processes for all of these targets, thereby addressing a strong need for coherence across domains of psychological research (Troe, 2004). Moreover, by describing how people can play a more proactive and prominent role in their own attitude change, the model meets recent calls for more research on the human potential for self-change and advancement (Seligman, 2003). At the same time, the model may ultimately help to address some core issues about the nature and extent of deliberate self-persuasion. T. D. Wilson and Brekke (1994) have argued that this inner-directed persuasive
control is not possible or, at least, is more difficult to accomplish than control of specific action tendencies. First, they note empirical evidence that it is difficult for people to control their thoughts and feelings (e.g., Wegner, 1989). Second, they cite a difficult example of belief change from William James, who asserted that one cannot look at a clock and say, “When the second hand reaches 12, I will believe that the wall is yellow instead of green and that the sun revolves around the earth.” Finally, they cite evidence that beliefs can persevere when people fail to decompose the causal explanations that support the belief.

In our view, T. D. Wilson and Brekke’s (1994) arguments are important, but mainly as signposts to potential constraints in the exercise of deliberate self-persuasion. The arguments do not demonstrate that people (a) do not attempt it and (b) cannot achieve it. For example, an important (but often ignored) caveat to the finding that thoughts and feelings are difficult to control is the finding that control is, in fact, successful when people are able to devote their full mental resources to the control process (Wegner, 1994). In addition, an important qualification to James’s anecdote is that some beliefs are much less open to perceptual and empirical validation than are others, and we should only expect deliberate self-persuasion on the more subjective of the beliefs (Festinger, 1957, 1964). To contrast with the cited example of James, we may not be able to will ourselves to believe that a yellow wall is green, but we might be able to will ourselves to believe that our current job is far better than unpalatable alternatives. Finally, as described in our model, it is quite likely that the reconstruction of causal explanations is one important potential mechanism for deliberate self-persuasion.

A model of deliberate self-persuasion is vital to addressing these issues. As Newman (1999) puts it, people may sometimes assess evidence with the “express goal of arriving at some preordained conclusion. . . . People talk themselves into things” (p. 62). Individuals have the capacity to try shaping, with a subjective sensation of willpower, their attitudes to meet desired goals. Research on deliberate self-persuasion lets us understand people in this role.

NOTES

1. The process of mental control has been examined in abundant past and contemporary theory and research. Anna Freud (1966) illustrated the notion of mental control in psychoanalytic defense mechanisms, such as reaction formation. Later, Bruner (1957) suggested that motivations and expectancies can determine which information comes to mind, and not just how information is interpreted. For example, people perceptually defend against seeing taboo words (Blum, 1955; McGinnies, 1950; Postman, Bronson, & Gropper, 1953). More recently, research has demonstrated that motives affect the spontaneous activation of out-group stereotypes (Cacioppo et al., 1996; Sinclair & Kunda, 1999).

2. In some contexts, people may initially draw inferences about the situation and then correct these inferences under conditions of high motivation and ability (Wegener & Petty, 1997). Such contexts are less relevant to our examples, however, which focus on cases where people wish to alter their attitude toward a particular object that has undesired attributes.

3. Failure at deliberate self-persuasion might cause people to focus on biased mechanisms of persuasion from others. For instance, research on persuasion from others has found that people are more influenced by sources that are expert, likable, and familiar (see Maio & Haddock, in press). It is conceivable that people can use these factors as tools to shape their own attitudes, based on lay theories of how persuasion works. For example, if people seek to develop a more positive attitude toward exercise, they could seek out the opinions of personal trainers, who will have expert information that can support their desired attitude. Nonetheless, there is no comprehensive description of lay theories that might guide deliberate self-persuasion, although evidence indicates that lay theories are important for predicting people’s attempts to correct the biasing effects of factors that they believe are unduly influencing their attitudes (Friestad & Wright, 1999; Wegener & Petty, 1997; T. D. Wilson & Brekke, 1994). In other words, there is a shortage of evidence describing the effects of these lay theories when people actually desire their biasing effects.

4. It is also interesting that Sackeim and Gur (1979) found that people with higher levels of self-deception were less likely to exhibit psychopathology, consistent with later speculations about the beneficial effect of positive illusions on mental health (Taylor & Brown, 1988; Sackeim and Gur focused on self-report biases as an explanation for this link, however.)

5. It could be argued that people enter a mind-set akin to the implemental mind-set described by Gollwitzer and his colleagues (e.g., Gollwitzer, Fujita, & Oettingen, 2004). This mind-set helps people to prepare for an action by summoning thoughts and feelings that support the action, and it preempts further deliberations about the merits of the action. In the case of deliberate self-persuasion, people start summoning resources to support an attitude and stop focusing exclusively on deliberating its validity—the focus is on changing an attitude (with its affective, cognitive, and behavioral components) rather than controlling a particular action.

REFERENCES


