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ATTITUDE CHANGE: Persuasion and Social Influence

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■ **Abstract** This chapter reviews empirical and theoretical developments in research on social influence and message-based persuasion. The review emphasizes research published during the period from 1996–1998. Across these literatures, three central motives have been identified that generate attitude change and resistance. These involve concerns with the self, with others and the rewards/punishments they can provide, and with a valid understanding of reality. The motives have implications for information processing and for attitude change in public and private contexts. Motives in persuasion also have been investigated in research on attitude functions and cognitive dissonance theory. In addition, the chapter reviews the relatively unique aspects of each literature: In persuasion, it considers the cognitive and affective mechanisms underlying attitude change, especially dual-mode processing models, recipients' affective reactions, and biased processing. In social influence, the chapter considers how attitudes are embedded in social relations, including social identity theory and majority/minority group influence.

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INTRODUCTION

This chapter reviews the research on attitude change from what traditionally have been two separate areas of inquiry, the study of message-based persuasion and the study of social influence. In the persuasion paradigm, influence appeals typically include detailed argumentation that is presented to individual recipients in a context with only minimal social interaction. Social influence appeals, in contrast, usually consist solely of information about the source's position, but these are delivered in more complex social settings that may include interaction among participants. Because of the marked continuities in the theoretical analyses and in the empirical findings that have emerged across these research areas in the past few years, this review draws from both literatures. It emphasizes in particular research published during 1996 to 1998, since the prior review of Petty et al (1997).

Giving social influence research a significant role in the current review requires that limited attention be given to some other research areas that have been featured prominently in the past. Work on attitude structure and on attitude-behavior relations has continued to flourish, and Eagly & Chaiken (1998) provide an excellent review elsewhere. Also noteworthy, despite some overlap with the current review, are Petty & Wegener (1998a), Cialdini & Trost (1998), and Chaiken et al (1996b). Another research area beyond the scope of this chapter is the extensive work on intergroup attitudes and stereotypes (Brewer & Brown 1998, Fiske 1998).

MOTIVES FOR AGREEING WITH OTHERS

A hallmark of social influence research is the delineation of the multiple motives that spur agreement or disagreement with others. For over 40 years, the central organizing perspective in this area has been a dual-motive scheme that differentiates between informational influence, which involves accepting information obtained from others as evidence about reality, and normative influence, which involves conformity with the positive expectations of ''another,'' who could be ''another person, a group, or one's self'' (Deutsch & Gerard 1955:629).

Yet contemporary theories of motives for attitude change and resistance appear to be converging instead on a tripartite distinction (e.g. Chaiken et al 1996a, Cialdini & Trost 1998, Johnson & Eagly 1989, Wood 1999; for an early presentation of this kind of framework, see Kelman 1958). Although these typologies each possess unique features, a common thread is the recognition that attitude

change can be motivated by normative concerns for (*a*) ensuring the coherence and favorable evaluation of the self, and (*b*) ensuring satisfactory relations with others given the rewards/punishments they can provide, along with an informational concern for (*c*) understanding the entity or issue featured in influence appeals. Thus, for example, Cialdini & Trost (1998) identify the behavioral goals of social influence recipients as managing the self-concept, building and maintaining relationships, and acting effectively. Similarly, Chaiken et al (1996a) distinguished between people's ego-defensive motives to achieve a valued, coherent self-identity, impression-related motives to convey a particular impression to others, and validity-seeking motives to accurately assess external reality.

Social influence researchers traditionally assumed that informational and normative motives are each associated with unique mechanisms that generate attitude change and with unique forms of change. The desire for an informed, correct position supposedly orients message recipients to process the content of the appeal and results in enduring private change in judgments. The desire to meet normative expectations supposedly yields less informational analysis and public, context-dependent, transitory judgment change. This view has been challenged by dual-mode processing models of persuasion (Eagly & Chaiken 1993, Petty & Wegener 1998a), especially by the demonstration that informational, accuracy-seeking motives can lead either to extensive processing and enduring attitude change or to more superficial processing and temporary change. In the dual-mode framework, motives for change are not preferentially related to change mechanisms or outcomes.

Two recent studies support the persuasion analysis by providing evidence that normative and informational motives affect influence through a common set of information-processing mechanisms (Chen et al 1996, Lundgren & Prislin 1998). Lundgren & Prislin (1998) found that, when participants were motivated to be accurate, they selected arguments to read on both sides (i.e. pro and con) of the target issue, generated thoughts that were relatively balanced in evaluation of both sides, and indicated relatively neutral attitudes. In contrast, when participants were motivated to convey a favorable impression to an interaction partner, they selected arguments to read that were congruent with the view ostensibly held by the partner and generated thoughts and attitudes that were congenial with their partner's position. Finally, when participants were motivated to defend their own position, they selected arguments to read that supported their view, generated thoughts supportive of their position, and indicated relatively polarized attitudes. Furthermore, analyses to test mediation revealed that the favorability of participants' thoughts (at least partially) mediated the effects of motives on attitude change. Thus, it appears that the attitude effects emerged in part because accuracy motives generated a relatively open-minded processing orientation, impression motives generated an agreeable orientation, and defense motives generated a protective orientation that maintained existing judgments.

These two studies also challenge the assumption that recipients' motives are associated with unique forms of attitude change. Regardless of the initial motive

directing attitude judgments, the attitudes participants expressed to their ostensible discussion partners persisted when participants later indicated their judgments privately (Chen et al 1996, Lundgren & Prislin 1998). Especially impressive is the persistence of attitudes designed to convey a favorable impression. Contrary to classic theories of social influence, attitudes directed by impression-related normative motives were no more ''elastic'' than were attitudes directed by accuracy-seeking, informational motives. Instead, it seems that impression and defense motives, much like the accuracy motives studied extensively in message-based persuasion research, can yield careful, systematic processing of relevant information that results in stable judgments. This finding augments the results of earlier research in which impression motives were linked to superficial processing and temporary judgment shifts (e.g. Cialdini et al 1976). The factors that determine whether motives instigate extensive or more superficial processing are discussed below.

Public Versus Private Influence

In social influence paradigms, researchers often have diagnosed the motive for attitude change from the continuity of recipients' judgments across public and private settings. In public settings, recipients believe that the source of the appeal or members of their experimental group have surveillance over their responses, whereas in private settings, recipients believe that these others are unaware of their judgments. Supposedly, attitudes that maintain across public and private measures are internalized responses that result from the thoughtful processing associated with accuracy motives, whereas attitudes that are expressed in public but not private reflect normative pressures such as acceptance from the source or group.

Recent empirical findings suggest instead that lack of continuity between public and private judgments is not reliably diagnostic of recipients' motives. As described above, enduring attitude change is not the unique province of informational motives; it also can emerge from social motives such as the desire to accommodate others (Chen et al 1996, Lundgren & Prislin 1998). Evidence of judgment stability across public and private settings has emerged also in influence in the Asch-type judgment paradigm. In this research, participants are exposed to others' obviously incorrect judgments of line length and participants' agreement with others typically is interpreted as public, superficial acquiescence to social pressure. Yet the meta-analytic synthesis by Bond & Smith (1996) of 97 studies using the Asch-type social influence paradigm revealed no greater agreement in public than in private contexts of attitude expression. It seems, then, that social motives for agreement affected attitudes in public as well as private settings.

The lack of systematic differences between public and private expressions of judgment can be attributed to a number of factors. One is that recipients' motives for agreement can have relatively extended effects that generalize to new contexts in which the original motives are no longer salient or relevant (e.g. Hardin &

Higgins 1996, Higgins 1981, Ruscher & Duval 1998). Extended effects can occur when the initial motivated judgment is retrieved in new settings or when the information on which the judgment was based is retrieved, given that the motivated processing yielded a biased representation of the original information. Thus, because motives affect the judgments and the judgment-relevant information available in memory, initial motivations for processing may have effects that transcend context, and positions stated in public contexts may be maintained in private. Kassin & Kiechel (1996) provide a compelling example of the extended consequences of motivated processing. They simulated procedures sometimes used in the interrogation of crime suspects by (falsely) accusing research participants of an act of negligence while they were typing data into a computer. When participants were subjectively uncertain about their innocence (because they were typing at a fast speed), they accepted a witness's report of their actions and (incorrectly) confessed to the allegation. For the majority of participants, the confession was not mere compliance. Over half reported in a subsequent discussion that they had performed the negligent act, and over a third actually confabulated details in support of the false allegation.

Furthermore, the distinction between public and private settings suggests an overly simplified view of social impact, one that equates social presence with surveillance. Allport's (1985) famous definition of social psychology provided a considerably more differentiated view of social impact, in which the effects of others emerge whether their presence is ''actual, imagined, or implied.'' Because important features of social impact may hold across public and private contexts, attitudes that are affected by these features may also hold across settings. For example, the manipulation by Baldwin & Holmes (1987) of social impact involved simply instructing female participants to think about two of their older relatives. The women were later given sexually explicit material to read in a supposedly unrelated context, and they reported not liking it much. Presumably, others' conservative moral standards were activated in the initial manipulation and continued to exert impact on subsequent experiences.

Theoretical perspectives need to progress beyond the simple distinction between public and private attitude expression and consider whether the features of social pressure that are relevant to attitude change are stable across settings. For example, in a meta-analytic synthesis of the minority-influence literature (Wood et al 1994), the influence of opinion-minority, low-consensus sources proved comparable in public and private settings. Thus, it seemed that attitude change was not controlled by surveillance and the fear that aligning with a deviant minority source in public would lead to social embarrassment and rejection by others. Agreement did vary, however, with another feature of the influence context; how directly attitudes were measured. ''Direct'' measures assess attitudes on the issue in the appeal, and recipients are aware that their (public or private) judgment can align them with the source's position. ''Indirect'' measures might, for example, assess attitudes on issues tangentially related to the appeal, and recipients are less aware that their judgments can align them with the influence

source. Minority impact was smaller on direct than on indirect measures. Wood et al (1994) concluded that recipients' resistance on direct measures is due to their own personal knowledge that their judgments could align them with a deviant minority source. It seems, then, that minority influence was inhibited by recipients' concern for the favorability and integrity of their self-concept and their place in their reference group, and that these motives held in both public and private contexts (see below).

The current analysis of attitude expressions in public and private contexts also calls into question the common assumption that when public and private judgments differ in accuracy, privately expressed ones are generally more trustworthy because public expressions may be biased to achieve social motives. Although some features of public contexts (e.g. politeness norms) may compromise the accuracy of attitude expressions, other features appear to enhance thoughtful analyses and sometimes to increase accuracy. Cowan & Hodge (1996) demonstrated that to the extent public contexts enhance perceived accountability for judgments, people give especially thoughtful, reasoned responses in public. Similarly, Lambert et al (1996) argued that the expectation of public discussion focuses people on their own attitudes and encourages them to bolster their beliefs; thus, attitudes were found to play a greater role in guiding thought and action in public than in private settings.

Finally, given that in social-influence paradigms respondents often give their judgments first publicly and then again privately, continuity across judgment contexts can emerge from the effects of initial judgments on subsequent ones. Research on the impact of behavior on attitudes has demonstrated that people's interpretations of their public statements and other attitude-relevant behaviors can instigate shifts in privately held attitudes to correspond to public acts (see Chaiken et al 1996b). This research also has demonstrated that public-attitude statements that are of questionable veracity (e.g. when a public statement is given with low choice or high reward) do not affect the attitudes expressed in private settings (see below). However, Maio & Olson (1998) provide intriguing evidence that even under low-choice conditions, the act of providing an attitude judgment can enhance the accessibility of one's own attitude in memory; accessible attitudes then may affect subsequent attitude-relevant judgments in seemingly unrelated contexts.

MOTIVES IN PERSUASION RESEARCH

Functional Theories

The motives underlying attitude change in message-based persuasion paradigms have been investigated primarily in research on attitude functions (see Eagly & Chaiken 1998). In addition to the basic adaptive function of enabling people to evaluate and appraise stimuli in their environment, attitudes also are thought to serve more specific functions. Functions identified in early work include securing

utilitarian outcomes, ego defense, value expression, and social adjustment (Katz 1960, Smith et al 1956). These functions are reflected in the tripartite motive scheme suggested above: Accuracy motives correspond generally to a utilitarian concern with maximizing rewards and minimizing punishments, self-concept motives correspond to concerns for defending the ego against potential threats and for expressing one's values, and social relation motives correspond to concerns for social adjustment and for obtaining social rewards and avoiding social punishments.

In one account of the role of attitude functions in influence, persuasive attempts are likely to be effective to the extent that the function of, or reason for holding, the position outlined in the appeal matches the function underlying recipients' attitudes (Lavine & Snyder 1996, Murray et al 1996: Study 2). For example, Lavine & Snyder (1996) reported that for people who are generally sensitive to the social consequences of their behavior (i.e. high self-monitors), appeals that emphasized the social adjustive functions of voting (e.g. enhancing one's attractiveness to others) elicited more favorable evaluations and greater attitude change than appeals that emphasized its value-expressive functions (e.g. a way to express values). For people who rely on inner dispositions (i.e. low self-monitors), appeals with value-expressive arguments yielded more favorable evaluations and were more persuasive. Furthermore, certain issues may be associated with certain attitude functions for most people. Although not specifically couched within a functional framework, the analysis by Rothman & Salovey (1997) of health-related messages suggested that influence is greatest when the orientation of an appeal matches the orientation intrinsic to the health issue itself. Recommendations to perform illness-detecting behaviors (e.g. breast self-exams) potentially incur risk and thus loss-framed appeals are likely to be effective, whereas recommendations for preventative behaviors (e.g. exercise) potentially incur positive outcomes and thus gain-framed appeals are likely to be effective.

In another account, matching between attitude function and message orientation does not always enhance persuasion but instead enhances careful thought about an appeal. Petty & Wegener (1998b) demonstrated that matched messages increased scrutiny of message content but enhanced persuasion only when the message contained strong, cogent arguments and not when it contained weak arguments. Yet because functionally matched messages potentially address important aspects of recipients' self-concepts, this careful processing will not always be objective and unbiased. Such appeals may instigate a thoughtful but defensive orientation, as recipients try to maintain valued aspects of the self. For example, Tykocinski et al (1994) reasoned that messages framed to match people's current experiences and concerns can elicit distress by identifying seemingly relevant goals that have not been adopted. Thus, such messages are especially likely to yield counterarguing and resistance. Similarly, Marsh et al (1997) reported that persuasive messages that address an important attitude function (i.e. for college students, the value-relevant issue of sororities/fraternities on college campuses) are processed carefully yet defensively and as a result are minimally influential.

Cognitive Dissonance Theory

This classic motivational theory of how attitudes change to maintain cognitive consistency continues to spark interest. The original notion of Festinger (1957) that dissonance arises from psychological inconsistency between linked cognitions has been modified extensively in subsequent research. In Cooper & Fazio's (1984) ''new look'' approach, dissonance arises not from simple inconsistency but rather from freely chosen behavior that brings about some foreseeable negative consequence.

A central question for dissonance researchers has been the motivational bases for dissonance and the cause of the aversive state of dissonance arousal. In Aronson's (1992) self-concept analysis, dissonance arises from inconsistent cognitions that threaten the consistency, stability, predictability, competence, or moral goodness of the self-concept. In Steele's (1988) self-affirmation theory, dissonance arises from the violation of general self-integrity. From these self-related perspectives, negative consequences are powerful inducers of dissonance because it is inconsistent with most people's self-views to act in a way that results in foreseeable aversive consequences. An alternate perspective on dissonance arousal, which has yet to be integrated into mainstream theorizing, is the argument by Joule & Beauvois (1998) that dissonance reduction is oriented toward rationalizing behavior rather than attaining psychological consistency.

In an interesting integration that recognizes that both self-concept threat and aversive consequences can instigate dissonance, Stone & Cooper (see Petty & Wegener 1998a) proposed that dissonance arises when people fail to behave in a manner consistent with some valued self-standard. The specific motivation behind dissonance supposedly depends on the type of self-standard involved. Dissonance can emerge from behavior that is inconsistent with personal self-standards and does not reflect the way people want to be (ideal self) or think they should be (ought self), or dissonance can emerge from behavior that generates aversive consequences and does not reflect how others want them to be (normative self-standards).

Several studies support the conclusion that dissonance motivation can emerge in contexts devoid of negative consequences. Participants in a study by Harmon-Jones et al (1996) freely engaged in the nonconsequential behavior of privately taking a counterattitudinal position, yet they experienced increased arousal and attitude shifts toward their expressed position. Similarly, Prislin & Pool (1996) found little evidence that dissonance arises only when behavior has identifiably negative consequences and instead concluded that dissonance emerges when behavior and its consequences challenge existing ideas about the self.

The hypocritical advocacy paradigm was developed to study dissonance motivation in the absence of negative consequences. In this research, participants advocate a proattitudinal position, are made aware of their past failures to act in accordance with this position, and (in order to reduce dissonance) then engage in acts congruent with the position (e.g. Fried 1998, Stone et al 1997). Although the

lack of immediate negative consequences to this proattitudinal advocacy might appear to indicate that such consequences are not critical for producing dissonance, proponents of the negative consequences view can rightly note that highlighting past failures to uphold one's stated beliefs identifies aversive consequences of past acts. However, Fried & Aronson (1995) argued for the importance of the self in instigating dissonance by noting that dissonance in this paradigm does not emerge when people are only reminded of past transgressions (i.e. negative consequences) and do not engage in proattitudinal advocacy and experience the self-related implications of this behavior.

The second major issue addressed in dissonance research is the multiple routes or modes through which dissonance can be reduced. Although self-affirming behavior that reestablishes personal integrity has been shown to reduce dissonance (Steele 1988), self-affirmations are not always the mode of choice. When multiple routes are available, people apparently prefer to reduce dissonance directly by changing attitudes and behaviors (i.e. modifying the inconsistent cognitions) rather than to alleviate it indirectly through self-affirmations (Stone et al 1997). Even people with high self-esteem, who should possess the resources to reduce dissonance by focusing on positive aspects of the self-concept, have been found instead to modify cognitions (Gibbons et al 1997). Other research has identified boundary conditions for the usefulness of self-affirmations. According to Blanton et al (1997), affirmations do not reduce dissonance if they remind people of the violated self-standard (e.g. reassurance of one's compassion when one has acted in a noncompassionate way), presumably because such affirmations make it more difficult to justify the dissonance-inducing act and lead one to dwell on the dissonant behavior.

Other research on modes of dissonance reduction has revealed individual differences in the route of choice. People who are high in attributional complexity and characteristically search for abstract, complex explanations appear to reduce the dissonance caused by counterattitudinal advocacy by considering possible external justifications for the attitude-discrepant act rather than by changing attitudes (Stadler & Baron 1998). In addition, suggesting that research has only begun to tap the variety of modes available, Burris et al (1997) documented the dissonance-reducing effects of transcendence (reconciling inconsistent beliefs under a broader principle) and reaffirmation of the attacked belief. A recognition of the full range of routes available for dissonance reduction can help to account for some of the seeming inconsistencies in the dissonance literature. For example, when Fried (1998) modified the hypocrisy paradigm to make public participants' past failures to live up to their attitudes, participants did not perform attitude-congruent compensating behaviors to reduce dissonance. Instead, they decreased the dissonance caused by public transgressions by changing their attitudes to be congruent with the behavioral transgression.

A new perspective worth watching is the development of formal mathematical models of dissonance-related processes. Parallel constraint satisfaction systems represent dissonance as a dynamic, holistic process and provide a means to eval-

uate consistency and other aspects of the relation between beliefs (Read et al 1997). In one application of this approach, researchers specify a network of attitudes and other cognitions, simulate changes in the network (according to prespecified rules of how the attitudes/cognitions are related to each other) until it reaches a state of overall consistency, and compare the results of the simulation to data from research participants. Shultz & Lepper (1996) were able to use this technique to successfully account for judgment change in several classic dissonance paradigms.

MULTIPLE ATTITUDES

Sources of Multiple Attitudes

A central assumption of much attitude theorizing is that people's evaluations of a given object are stable across time, context, and form of assessment. Empirical evidence of this coherence has emerged with increasing clarity in recent years, in part due to improved understanding of the determinants of coherence in attitudinal responses [e.g. strong attitudes (Petty & Krosnick 1995)] and in part to improved methods to document coherence [e.g. compatibility in measurement (Ajzen 1996)]. However, empirical evidence that people can hold multiple attitudes toward a given object is emerging as well, and this profile of dissociation has been explained in a number of ways.

The evidence for multiple attitudes has sometimes been dismissed as reflecting epiphenomena (e.g. context effects, ''nonattitudes'' or weakly held attitudes). Yet multiple attitudes also can stem from more enduring effects. For example, attitudes that vary with context can represent temporary constructions (e.g. differential use of rating scales, anchoring, and adjustment effects) or more internalized tendencies to respond that are stably linked to certain contextual features (McConnell et al 1997). In addition, multiple evaluations of an attitude object can emerge from attitude structure. They can reflect the superficial responses associated with attitudes that have minimal cognitive and affective bases or the more stable reactions associated with attitudes that have inconsistent components, as when attitudes are structurally inconsistent (e.g. Chaiken et al 1995, Prislin et al 1998), held with ambivalence (Priester & Petty 1996, Thompson et al 1995), or associated with varied affective responses [e.g. immediate versus anticipated future affect (Richard et al 1996a,b, Van der Pligt et al 1998)].

In recent years, multiple attitudes have begun to generate interest in their own right, as increased theoretical understanding provides a basis for predicting both the coherence and the dissociation that occurs in attitude judgments (e.g. Mackie & Smith 1998, Wilson & Hodges 1992). This is a still-developing research area that encompasses a somewhat diverse set of effects, including context-dependent attitudes, multiply categorizable attitude objects, explicit versus implicit attitudes, subjective construals, and issue framing. The common theme linking these various

research areas is that people's responses to a particular attitude object can reflect diverse evaluations, cognitive representations and interpretations, and affective reactions.

One source of dissociations is the variety of motivations that can underlie attitudes. Dissociation is implied in the claim of social influence theorists that people are motivated to adopt attitudes of relevant reference groups to the extent that the group identity is salient and desirable (Kelman 1958, Turner 1991). That is, people may possess multiple cognitive representations of attitudes on an issue that is important to more than one of the groups with which they identify. Preliminary support for this idea was provided in findings by Wood & Matz (unpublished data) that college students' attitudes toward welfare programs were more favorable when their social identities as religious people were salient (relative to a base-line attitude measure obtained with no salient group identity), whereas students' attitudes were less favorable when their identities as political conservatives were salient. Furthermore, these attitude shifts emerged most strongly among participants who considered religious or conservative social groups to be self-defining.

Dissociations also can arise from cognitive processes. To the extent that an attitude object (e.g. yogurt) is relevant to a diverse set of issues and values, people can select from multiple categories (e.g. dairy products, health foods) when construing the object. A number of factors determine the category selected, including the accessibility of category attitudes (ER Smith et al 1996). Furthermore, a single attitude object may generate multiple representations in memory when attitude-relevant information is stored separately from overall evaluations of the object (Hastie & Park 1986). Indeed, McConnell et al (1997) demonstrated that different attitudes can be generated in different contexts for a single attitude object when perceivers do not attempt, on-line, to form an integrated attitude. Multiple cognitive representations of an issue also can emerge from information processing in social influence settings. After being exposed to the judgments of others in an influence appeal, recipients may later retrieve this information without recognizing its source and, under some circumstances, unwittingly adopt it as their own response (Betz et al 1996).

Dissociations also can arise as by-products of the variety of processes through which attitude-relevant judgments are generated. Explicit, conscious judgments differ in a number of ways from judgments that are implicitly held, including the kinds of information considered (Ajzen 1996, Greenwald & Banaji 1995). For example, Wittenbrink et al (1997) suggest that explicit and implicit measures of racial prejudice are only moderately correlated because people are more likely to base explicit judgments on an egalitarian ideology; thus explicit attitudes toward racial minorities are more favorable than implicit ones.

Influence and Multiple Attitudes

Influence strategies have capitalized on the multiple cognitive representations, affective reactions, and evaluations that people can hold concerning a given object. Asch (1940) argued early on that the primary process in influence is not

change in attitudes toward an object but rather change in the definition and meaning of the object. When meaning changes, attitudes change accordingly. The link between meaning and evaluation is suggested in the finding by Bosveld et al (1997) that people are more favorable toward ''affirmative action'' when others claim that it refers to equal opportunity rather than, for example, reverse discrimination. Even subtle aspects of the way an issue is framed or represented in an appeal, such as the apparent location and time at which a proposal will take place, can affect recipients' attitudes (Liberman & Chaiken 1996). This latter finding raises troubling questions for persuasion research that has varied personal relevance through the supposed time or location of a message proposal (e.g. instituting senior comprehensive exams at one's own university or another university). Typically, it has been assumed that recipients are responding to comparable attitude objects regardless of whether the time and location of the message proposal renders it personally relevant.

Issue framing is an influence strategy that capitalizes on multiple attitudes. In this approach, the importance and relevance of certain consequences or attributes of an issue are emphasized over other potential consequences (Ball-Rokeach & Loges 1996, Nelson & Kinder 1996, Nelson et al 1997, Price & Tewksbury 1997). For example, Eagly & Kulesa (1997) illustrate how persuasive appeals from both sides of environmental debates have framed desired positions as achieving values favored by recipients (e.g. a healthy economy based on tourism or based on logging and industry) and framed the nondesired position as achieving values most recipients reject.

Readers may wonder how appeals that use framing differ from ones that use the belief change strategies typical of message-based persuasion paradigms. Standard persuasion appeals typically address intraattitudinal relations and describe the specific attributes possessed by an attitude object. In contrast, as implied in the label, framing appeals typically address interattitudinal relations and place an issue or object in the context of other attitude issues, values, and goals. Furthermore, framing appears to highlight the relevance or importance of existing knowledge structures and values. Nelson et al (1997) reported that framing effects are typically stronger for participants familiar with an issue (i.e. possessing the relevant knowledge structures) than for those unfamiliar with it. Despite these unique features of framing, established models of attitude change seem appropriate for understanding its effects. For example, expectancy-value formulations can account for framing effects through variations in the salience and likelihood of relevant goals and values, as well as through variations in the evaluation given to them (Ajzen 1996).

The mechanisms underlying framing effects probably depend, as in standard persuasion paradigms, on the extent to which recipients are motivated and able to process message content and other relevant information (see discussion of the dual-mode information processing models in next section). For example, the impetus to adopt a new interpretation or frame for an issue can arise from motivational goals such as rejecting a strongly disliked group identity. In a demon-

stration of this process, college students informed that their attitudes corresponded to those of a hated group, the Ku Klux Klan, shifted their own interpretations of the issue away from a seemingly racist construal; they then were able to shift their attitudes away from those of the Klan (Wood et al 1996, Pool et al 1998).

DUAL-MODE PROCESSING MODELS OF PERSUASION

Persuasion research has continued in the highly successful tradition of the dual-mode processing theories, the heuristic/systematic model (Chaiken et al 1996a) and the elaboration likelihood model (Petty & Wegener 1998a). The central tenet of these theories is that the determinants and processes of attitude change depend on people's motivation and ability to process issue-relevant information. When people are not highly motivated (e.g. the issue is not personally involving) or they have low ability (e.g. they are distracted), attitude judgments are based on easily available attributes of a source, message, or situation that are evaluated via efficient processing strategies. For example, they might use the heuristic rule, consensus implies correctness, and thus agree with a majority position. When people are both motivated and able to process information carefully, then attitudes are based on a more thoughtful, systematic assessment of relevant information. According to the elaboration likelihood model, such high-elaboration processes include learning message content, generation of cognitive responses, and dissonance-induced reasoning (Petty & Wegener 1998a). For evaluations of the similarities and differences between the heuristic/systematic model and the elaboration likelihood model, see Chaiken et al (1996a), Eagly & Chaiken (1993), and Petty & Wegener (1998a).

Research has continued apace identifying the factors that enhance systematic, thoughtful processing. According to the heuristic/systematic model, people are motivated to engage in systematic thought in order to achieve a sufficient ''desired level of confidence'' in their judgments. Factors that have been found to increase systematic processing (presumably by decreasing actual confidence or increasing desired confidence) include the following: framing of persuasive messages in an unexpected manner (Smith & Petty 1996); self-relevance of messages, either because recipients self-reference or are made self-aware (Turco 1996); and use in messages of token phrases that ambiguously signal broader values, such as, for Democrats, ''family values'' rhetoric (Garst & Bodenhausen 1996). Systematic processing also has been found when recipients hold strong, accessible attitudes on the message topic (Fabrigar et al 1998), hold ambivalent attitudes (Maio et al 1996), or enjoy effortful cognitive activity (i.e. are high in need for cognition; for review, see Cacioppo et al 1996). In addition, recipients engage in systematic processing in circumstances in which careful thought is likely to generate judgment confidence, such as when recipients believe in their own efficacy and ability to evaluate (Bohner et al 1998b) and when the message is presented in accessible, not overly complex language (Hafer et al 1996).

Systematic processing also may be implicated in resistance to influence. Pfau's (1997) insightful review of resistance research focused in particular on inoculation procedures, in which recipients receive information that strengthens their attitudes before exposure to persuasive attack. He argues that inoculation effects emerge when anticipated threats (e.g. warning of a potential attack to one's attitudes) motivate thoughtful processing to support one's own position or to counter opposing ones. Furthermore, resistance to attitude change appears to increase at midlife (Visser & Krosnick 1998). Middle-aged people appear to have especially strong attitudes that enable them to counterargue opposing positions.

Heuristic processing is used when a low-effort strategy yields attitudes with a sufficient level of confidence (Chaiken et al 1996a). A variety of heuristic cues have been identified in recent research. For example, familiar sayings can provide cues to agreement (Howard 1997), and the subjective experience of thinking about an issue can be a cue, so that, for example, people adopt positions when they can easily generate supportive arguments and reject positions when they cannot (Rothman & Schwarz 1998). In addition, relevant to understanding the heuristic cues used in everyday contexts are Dickerson's (1997) observations of politicians bolstering their favored positions with references to unbiased, expert sources and sources with an apparent allegiance to the opposition.

Cognitive Response Mediation of Attitude Change

Research has continued to address the mechanics underlying systematic, high-elaboration processing. One question is whether the valence of recipients' cognitive responses mediates persuasion or whether valence represents either an alternate measure of attitude change or an after-the-fact justification of change. To test causal precedence, Romero et al (1996) and Killeya & Johnson (1998) directly manipulated thoughts and examined the effects on attitudes. Consistent with the perspective in which thoughts mediate change, acceptance of the position in the appeal corresponded to the extent and valence of the generated thoughts. Furthermore, correlational analyses in these studies, as well as in several studies that assessed recipients' spontaneously generated thoughts (e.g. Friedrich et al 1996, Hafer et al 1996), proved consistent with the mediational role of thoughts.

Conclusions concerning causal order are complicated, however, by the few studies that reordered the typical causal sequence tested in correlational designs and found that attitudes can successfully mediate the effects of independent variables on thoughts (Friedrich et al 1996, Maio & Olson 1998). Yet the evidence of mutual mediation through attitudes as well as thoughts does not necessarily represent a challenge to the cognitive response model. Mutual mediation could reflect the simultaneous use of dual processing modes. People may engage simultaneously in effortful processing, in which an appeal instigates thoughts that then affect attitudes, along with less effortful processing, in which attitudes are directly affected by an appeal through, for example, heuristic analyses (Chaiken et al

1996a). When appeals have a direct effect on attitudes, then thoughts may reflect an after-the-fact justification for attitude judgments.

Another question is whether cognitive responses provide a sufficient model of mediation. Munro & Ditto (1997) and Zuwerink & Devine (1996) report that attitude change on prejudice-related issues is linked to message recipients' subjective experience of affect in addition to the favorability of their thoughts. Although it is possible that the insufficiency of thoughts as a mediator stems from measurement limitations (e.g. poor reliability or validity of coding of thought protocols), it also is possible that for prejudice and other attitudes with a strong affective basis, changes in affective reactions impact attitudes independently of cognitive responses.

Dual-Mode Processing Models and Social Influence

Dual-mode models also can provide a framework for understanding attitude change in social influence settings. For example, careful scrutiny of other group members' answers to a judgment task appears to depend on participants' motivation to perform well and their ability to conduct their own evaluations of the task. Baron et al (1996) reported that highly motivated participants relied on their own evaluations except when judgment stimuli were presented too briefly to identify the correct answer; then they appeared to adopt the heuristic strategy of relying on others' judgments. In contrast, participants who were only moderately motivated used the heuristic-like strategy of relying on others' estimates regardless of whether they could determine the correct answer themselves. The heuristic cues important in social influence settings include not only others' judgments, but also aspects of social interaction and others' self-presentation. For example, group members who are more confident in their judgments have been found to be more influential in discussions, regardless of their actual task accuracy (Zarnoth & Sniezek 1997).

The group discussion research by Kelly et al (1997) also can be interpreted from a dual-mode perspective. When members were motivated and able to achieve accurate solutions (i.e. the task had a seemingly correct solution, time was sufficient), group discussions entailed considerable reasoning and argumentation. Furthermore, systematic reasoning was apparently successful in yielding valid solutions; more systematic thought during discussion was associated with greater solution accuracy. Also interpretable from this perspective is the finding by Shestowsky et al (1998) that in dyadic discussions, participants who were motivated to engage in cognitive activities (i.e. were high in need for cognition) had the greatest impact on group decisions. Although no direct evidence was obtained that motivated participants engaged in careful analysis during the discussion or that this is what made them influential, participants' self-ratings suggested that those who valued thinking activities presented many arguments, presented valid arguments, and tried hard to be persuasive.

Motivated Processing and Bias Correction

Research has continued to document how recipients' motives (i.e. to defend self, maintain desired relations with others, have accurate judgements) instigate and direct systematic processing and yield more favorable evaluations of goal-promoting than hindering information (Munro & Ditto 1997, Zuwerink & Devine 1996). Motives also can yield selective use of heuristic cues, such as relying on social consensus when it provides adequate support for one's desired position (Giner-Sorolla & Chaiken 1997).

A variety of factors appear to motivate biased processing, including recipients' broader values (Eagly & Kulesa 1997, Maio & Olson 1998, Seligman et al 1996) and self-interests (Giner-Sorolla & Chaiken 1997), and attitude issues that are highly important and involving (Zuwerink & Devine 1996). However, the role of ability in biased processing remains unclear. Although some have speculated that bias emerges when people rely on their (presumably predominantly attitude-supportive) personal beliefs and knowledge to evaluate an issue, Biek et al (1996) found knowledge alone to be insufficient; thoughtful biased processing emerged only when knowledgeable people were also highly motivated (e.g. by strong affect) to hold a particular position.

Asymmetries also have been noted in motivated processing. People sometimes respond more intensely to threatening information that disconfirms their desired view than to congenial information that confirms it (see also Cacioppo et al 1997). Ditto et al (1998) speculate that because threatening stimuli are likely to require an immediate behavioral response, it is adaptive for people to conduct an objective, critical analysis of preference-inconsistent information while responding more passively to congenial information (see also Edwards & Smith 1996). It seems likely, however, that people use a variety of processing strategies to meet defensive goals. For example, a strategy of defensive inattention to challenging information can explain the finding by Slater & Rouner (1996) that people more carefully process congenial than threatening health-related information (see below).

An interesting question that has emerged in the past few years is whether people are aware of and can counteract biases and shortcuts in their information processing strategies. Wegener & Petty (1997) suggest that people engage in bias correction processes to the extent that they believe factors unrelated to the true qualities of the attitude issue have influenced their judgments and to the extent that they are motivated and able to counteract the bias. Although an implicit assumption seems to be that validity-seeking motives instigate bias correction, other motives also are plausible (e.g. the self-related motive of being an objective, impartial judge, the other-related motive of conveying this impression to others).

In a test of bias correction, Petty et al (1998) simulated a context in which it would be illegitimate to rely on heuristic rules. Participants were instructed to avoid letting their biases about a seemingly likable or unlikable source influence

their judgments of the source's proposal. The result was an apparent overcorrection in which the dislikable source was more persuasive than the likable one. Furthermore, because the correction instructions appeared to affect processing independently of participants' motivation to scrutinize the message, Petty et al (1998) concluded that careful message scrutiny does not spontaneously include attempts to counteract potential biases.

Bias correction also emerges in jury trials when the evidence presented is subsequently ruled inadmissible by the court. In experimental trial simulations, whether such evidence is discounted appears to depend in part on the reason for it being inadmissible. Evidence excluded because it was unreliable or because it was presented for some personal motive had little effect on judgments, whereas evidence excluded for procedural reasons continued to exert impact (Fein et al 1997, Kassin & Sommers 1997). In addition, consistent with Wegener & Petty's (1997) model, people attempting to compensate for inadmissible evidence have been found to both over- and undercorrect, depending on whether they believe the evidence was likely to have a strong or a weak impact on their judgments (Schul & Goren 1997).

AFFECT AND INFLUENCE

Effects of Mood

Several models have been developed to explain the effects of mood on information processing and attitude change. According to Wegener & Petty (1996), mood effects vary with elaboration likelihood. Direct effects of mood on agreement emerge through low-elaboration processes, including association of a persuasive appeal with positive or negative feelings (e.g. classical conditioning) and use of heuristic rules based on those feelings (e.g. ''I feel bad so I must dislike it''). When people are more extensively processing, how an attitude object makes them feel can serve as a persuasive argument. It also can bias the information considered, such as when people attend more to messages that match their mood or when they recall such information more accurately (Rusting 1998). When amount of elaboration is at some middle level, people respond strategically to ''manage'' moods. Happy people selectively process in order to maintain their positive mood (e.g. attending to information that makes them feel good), whereas sad people are less selective because there is greater potential for any activity to be mood enhancing.

Alternatively, in the feelings-as-information account, moods signal appropriate processing strategies (Bless et al 1996, Schwarz 1997, Schwarz & Clore 1996). Similar to the discussion in the prior section concerning asymmetrical effects of motives on processing, positive moods suggest a benign environment appropriate for heuristic strategies, whereas negative moods indicate a potential problem that may require systematic evaluation. Yet all negative emotions do not appear to

have the same processing implications. Ottati et al (1997) found that anger (marginally) reduced systematic processing relative to neutral moods, perhaps because anger implies agonistic contexts requiring quick response.

Controversy has emerged concerning whether negative affect enhances processing through mood management, as suggested by the elaboration model of Wegener & Petty (1996), or through signaling a problematic situation, as suggested by the feelings-as-information account of Schwarz & Clore (1996). At present, the available empirical data can be interpreted as supporting either perspectives. In addition, research findings have been taken to support a third, affect-infusion model (Forgas 1995), in which affect infuses thoughts and behaviors primarily when people engage in systematic, substantive processing. Although Forgas (1998) concluded that empirical tests support affect infusion, the finding that moods bias and direct systematic processing of influence appeals also is consistent with the other two models considered here.

Fear Appeals

The effects of fear-inducing appeals have been of particular interest in the health domain. Several theories have outlined the proximal beliefs through which fear-inducing appeals affect influence. According to protection motivation theory (Rogers 1983), appeals that are threatening and that offer an effective means of coping with the threat instigate danger control processes, which include accepting the recommended coping strategy and changing the maladaptive behavior (Prentice-Dunn et al 1997, Sturges & Rogers 1996). Rogers & Prentice-Dunn (1997) concluded that about half of the studies to date that have performed appropriate tests have supported the theory's prediction of maximum acceptance when perceived threat and coping are both high.

The extended parallel process model (Witte 1992, 1998) has linked influence to fear-control as well as danger-control responses. When threat is greater than coping, fear reactions can instigate message rejection through defensive responses (McMahan et al 1998, Witte et al 1998). Consistent with this view, Aspinwall & Brunhart (1996) reported that people who are not very optimistic about their own health coping strategies are less likely to attend to threatening health information than those who are more optimistic. Because fear-control responses inhibit the adoption of self-protective acts suggested in the appeal, they can account for the sometimes obtained ''boomerang'' shifts in attitudes away from messages when people do not believe they can cope effectively (Rogers & Prentice-Dunn 1997).

Research also has continued to investigate the effects of fear on message processing and to integrate the study of fear appeals into the broader models of mood and influence covered above. Fear, like other affective responses, appears to impact extent of processing. At low-to-moderate levels, fear functions like personal involvement and increases processing (Rogers & Prentice-Dunn 1997). Increased processing (at least of strong messages) may explain the often-obtained finding that fear facilitates influence and acceptance of new coping strategies (e.g.

Dillard et al 1996, Millar & Millar 1996). But fear also can bias processing in a way that justifies existing coping (or noncoping) behaviors (Biek et al 1996). At high levels, fear appears to reduce systematic processing (e.g. Jepson & Chaiken 1990). In general, the nonlinear effects of fear on processing are compatible with the idea that fear is multidimensional and involves both arousal and negative affect. Measurement scales that have been designed to tap the activation component have found that greater reported fear (i.e. arousal) enhances influence, whereas scales that have been designed to tap the negative tension component have found that greater fear (i.e. negative affect) inhibits influence or has minimal effect (Celuch et al 1998, LaTour & Rotfeld 1997).

GROUP AND SELF-IDENTITY

Social identity theory (Tajfel 1981, 1982) has sparked considerable interest in group influence as well as in other aspects of group behavior (see Brewer & Brown 1998). In the social identity view, when people categorize themselves as an ingroup member, the ingroup serves as a reference for social comparison, and people adopt the prototypic ingroup attitudes and beliefs as their own. Building on this analysis, Turner (1982, 1991) proposed that groups exert influence through a specific process, which he called referent informational influence. In this view, agreement from others categorized as similar to self enhances one's subjective certainty and suggests that the shared attitudes reflect external reality and the objective truth of the issue. Disagreement from similar others yields subjective uncertainty and motivates people to address the discrepancy through, for example, mutual social influence or attributional reasoning to explain the disagreement.

Empirical data from a variety of research paradigms are congruent with the social identity approach. Content analyses by Reicher & Hopkins (1996a,b) of political and social speeches illustrate the central role of ingroup and outgroup definitions in everyday persuasion. For example, their analysis of an antiabortion speech delivered to medical doctors revealed that it defined doctors and antiabortion activists as a common ingroup in their concern for others' welfare, defined antiabortion activity as consonant with the medical identity, and defined abortion-rights proponents as a derogated outgroup. Other work has supported the social identity claim that influence stems from prototypic group attitudes. In the small group discussions examined by Kameda et al (1997), final decisions were influenced most strongly by ''cognitively central'' group members, whose initial beliefs about the discussion topic overlapped the most with other members. The influence advantage of prototypic members was independent of whether their initial judgment preferences placed them in the group majority or minority. Kameda et al (1997) argued that the shared beliefs and knowledge provided social validation for other members' views and a basis on which others could recognize prototypic members' expertise.

The self-categorization analysis differs from standard persuasion models in locating the determinants of attitude change in people's construction of group identity rather than in their understanding of attitude issues. One kind of evidence presented in support of this analysis is that influence varies with group membership (e.g. Haslam et al 1995). Other evidence is that the influence of a group does not depend on recipients learning the content of the influence appeal (McGarty et al 1994; see also Haslam et al 1996). Although some research has suggested that ingroup influence is accompanied by acceptance and learning of the message (e.g. Mackie et al 1992), Haslam et al (1996) argue that such learning occurs after adoption of the ingroup position, as people try to understand the group view in order to be an effective group member.

The self-categorization theory claim that group identity can have a direct effect on influence is compatible with a heuristic-like reasoning process in which people are persuaded because of the seeming validity of ingroup positions (e.g. my kind of people believe X). Yet evidence also exists for other kinds of processing. Empirical research has identified a number of conditions under which group identity motivates recipients to conduct a systematic, careful evaluation and interpretation of the appeal, and attitude change or resistance depends on this evaluation. Systematic processing has been found when the identity of the source group is relevant to recipients' own self-definitions (Wood et al 1996), when the issue is relevant to recipients' membership group (Crano & Chen 1998, Mackie et al 1990), when the message position is representative of ingroup consensus and thus is informative about the true group norms (van Knippenberg & Wilke 1992), and when the influence appeal evaluates an ingroup member and thus has implications for recipients' self-evaluations (Budesheim et al 1996). Systematic processing also emerges when recipients are unable to process heuristically, such as when the group position is provided after the message (Mackie et al 1992), and when the context enables careful analysis, such as when people have sufficient time to process a message from a salient, potentially important ingroup (Hogg 1996). Thus, the empirical data suggest that group influence does not operate through a single process. People's motives to align with or differentiate from social groups can yield heuristic analyses and other forms of relatively superficial information processing, or they can yield careful, systematic processing of relevant information.

Social Consensus and Validity of Information

Social identity and self-categorization theories offer a new perspective on the question of what makes information influential (see also Moscovici 1976). In message-based persuasion paradigms, strong, cogent arguments typically have been defined as ones that link the attitude issue to highly valued outcomes and that generate favorable reactions from recipients, whereas weak arguments are ones that link the issue to less-valued outcomes and that generate more negative reactions (Eagly & Chaiken 1993). Recent work within this tradition, for example,

has examined how inserting weak arguments into an otherwise strong message can impair persuasion (Friedrich et al 1996, Friedrich & Smith 1998).

Social identity perspectives instead have focused on the social determinants of information validity. This view was developed in opposition to Festinger's (1954) claim that people prefer objective reality testing and use social reality testing (e.g. comparison with others' views) primarily when objective standards are not available. In self-categorization theory, reality testing is a single process in which people use the normative standards of relevant reference groups to achieve a valid, consensually shared understanding of reality congruent with their social identity (Turner 1991). In a strong statement of the implications of this position, Turner & Oakes argued that consensual judgments ''are rationally more likely to reflect a deeper truth about the world, not because agreement always indicates accuracy, but because they have emerged from, and survived processes of discussion, argument, and collective testing'' (1997:369).

Empirical data, however, suggest that the relation between social consensus and the apparent accuracy of information is contingent on a variety of factors. Subjective validity emerges from consensus that is established through the convergence of independent rather than dependent views and through validation by an individual's own, private cognitive processing (Levine 1996, Mackie & Skelly 1994). Furthermore, social consensus appears to be more impactful for some kinds of issues than for others, presumably because ingroup consensus implies subjective validity more strongly for some issues than for others. For example, majority consensus has an especially strong impact on judgments of personal preference, and less impact on judgments of objective stimuli, presumably because consensus indicates preferences likely to be shared with similar others (Crano & Hannula-Bral 1994, Wood et al 1994).

Multiple Motives Instigated by Groups

In social identity and self-categorization theories, the motive for influence derives largely from the desire to establish and maintain a positive evaluation of the self. In support, Pool et al (1998) demonstrated that people maintain a favorable self-view by shifting their attitudes to align with positively valued groups and to deviate from negatively valued ones. Attitude change motivated by social identity also can be driven by other self-related concerns, such as striving to be true to oneself and to achieve a coherent, certain self-view (Abrams & Hogg 1988).

The tripartite analysis of motives presented in this chapter suggests additional reasons why people adopt or reject group positions (see also Wood 1999). One involves the positive and negative outcomes provided by others. For example, going along with others in order to get along with them (i.e. receive social rewards and avoid punishments) is likely to be important in close relationships and other ingroup settings in which social harmony is valued. Another potential motive for adopting or rejecting group positions is in order to achieve an accurate, valid

understanding of reality. This possibility challenges perspectives that have associated group influence with bias. For example, in an analysis of democratic participation, Pratkanis & Turner (1996) proposed that active, deliberative discussion and analysis of political issues occurs when citizens view issues as personally relevant, whereas uncritical acceptance of political solutions and propaganda provided by a ruling elite occurs when citizens wish to assume a certain social identity (e.g. party allegiance). However, to the extent that some social and group identities (e.g. informed voter, responsible citizen) motivate people to adopt valid, accurate positions, then group-related motives are not necessarily associated with biased processing.

OPINION MINORITY AND MAJORITY GROUPS

The seeming paradox that ''few can influence many'' has continued to spark interest in minority influence. This work typically defines minorities as sources advocating infrequent, low consensus positions.

Recent research has progressed beyond the original notion that minority sources are influential because they elicit informational conflict and challenge recipients' understanding of issues (Moscovici 1985). Instead, the most consistent finding appears to be that the social identity of minorities inhibits influence. Minorities are most influential when their impact is assessed on ''indirect'' judgment measures—ones on which recipients are relatively unaware that their judgments could align them with the deviant minority source (Wood et al 1994). Yet even on indirect measures, evidence of minority impact often fails to emerge (Martin 1998). Minorities seem to face two impediments to exerting influence. They are, by definition, not important reference groups. Thus source group identity is unlikely to motivate people to attend to and evaluate an appeal (De Vries et al 1996). Furthermore, even when people process the appeal, the source's low consensus, deviant position is likely to yield a negatively biased processing orientation. As a result, recipients resist influence (Mugny 1980, Erb et al 1998) or demonstrate ''boomerang'' shifts away from the minority view (Pool et al 1998, Wood et al 1996).

In a series of elegant experiments, Crano and his colleagues (Alvaro & Crano 1996, 1997; Crano & Alvaro 1998; Crano & Chen 1998) demonstrated that these impediments to minority influence can be surmounted by ingroup minority sources (see also David & Turner 1996). It appears that the distinctiveness of ingroup minority positions encourages careful message processing, yet with the lenient, open-minded orientation typically accorded to ingroup members. The deviance of the minority view attenuates acceptance on direct attitude measures but the imbalance in attitude structure that results from message processing yields attitude change toward the minority view on measures indirectly related to the appeal.

Several lines of research have documented the kinds of thought recipients generate to minority appeals. Especially in problem-solving contexts in which novel solutions are valued (Nemeth 1986), minorities encourage recipients to think about issues in a divergent manner and to consider novel ideas and solution strategies (Butera et al 1996, Erb et al 1998, Gruenfeld et al 1998, Nemeth & Rogers 1996, Peterson & Nemeth 1996). Attributional reasoning is also likely to mediate influence, given that minority positions are often unexpected and require explanation. Research findings generally support the analysis by Eagly et al (1981) that influence is impaired when the advocated position can be attributed to a potentially biasing attribute of the source or situation, such as the source's personal self-interest (Moskowitz 1996). In like manner, influence is enhanced when the advocated position can be attributed to external reality or the truth about the issue (Bohner et al 1996, 1998a). Also suggesting attributional reasoning is the finding that minorities are influential when they express their views in contexts, such as face-to-face interaction, in which deviancy can incur costs (McLeod et al 1997). Advocacy then suggests a source who is sufficiently committed and certain to risk social rejection.

A useful goal for future research will be to identify the specific aspect(s) of minority identity that motivate agreement or resistance. Following the three-motive scheme of this chapter, it may be that the minority source has relevance for recipients' personal identities and represents, for example, a deviant other from whom they wish to differentiate or a valued innovator they wish to emulate (Wood et al 1996). Another motive concerns recipients' relations with others, such as the desire to be lenient with ingroup minority sources (Crano & Chen 1998). Finally, recipients could achieve an accurate understanding of an issue by agreeing with minorities whose positions appear to reflect external reality (Bohner et al 1996).

CONCLUSION

This chapter has drawn from the literatures on message-based persuasion and social influence to identify common themes in attitude change research. In these traditionally separate areas of investigation, theoretical and empirical work has begun to delineate the motives underlying recipients' responses to influence appeals and the variety of cognitive and affective processes involved in attitude change and resistance.

The *Annual Review* chapter on attitudes traditionally has focused on message-based persuasion research that examines attitudes at the individual level. From this standpoint, the current inclusion of social influence findings highlights the sometimes neglected point that attitudes are social phenomena, that they emerge from and are embedded in social interaction. Yet, enthusiasm for aggregating knowledge across these two areas of investigation should not overwhelm the

equally important point that each area is associated with unique predictors and processes. Models of influence via complexly argued persuasive messages will need to address unique factors that are not as important in the study of simple messages, including recipients' ability to engage in extensive cognitive processing and their knowledge about the message topic. In like manner, models of influence in groups and other complex social contexts address unique factors such as the likelihood of information exchange and the interaction structure in the social setting.

A challenge for future investigation will be to continue to develop models of social and cognitive processes that are sufficiently inclusive to capture attitude change in the variety of social and informational settings in which it occurs. An important aspect of this challenge is to place persuasion and social influence within a framework that recognizes cross-cultural and ethnic effects. It is appropriate to end the chapter with a noteworthy example of such an approach, the meta-analytic synthesis by Bond & Smith (1996) of social influence experiments from 17 countries. The usefulness of integrating cultural-level phenomena into attitude theories is evident in the greater levels of conformity in experiments conducted in nations characterized by collective than by individualistic values.

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