

SOCIAL INFLUENCE: Compliance and Conformity

Robert B. Cialdini and Noah J. Goldstein

Department of Psychology, Arizona State University, Tempe, Arizona 85287-1104;
email: Robert.Cialdini@asu.edu, Noah.Goldstein@asu.edu

Key Words obedience, norms, foot-in-the-door, door-in-the-face, motivation

■ **Abstract** This review covers recent developments in the social influence literature, focusing primarily on compliance and conformity research published between 1997 and 2002. The principles and processes underlying a target's susceptibility to outside influences are considered in light of three goals fundamental to rewarding human functioning. Specifically, targets are motivated to form accurate perceptions of reality and react accordingly, to develop and preserve meaningful social relationships, and to maintain a favorable self-concept. Consistent with the current movement in compliance and conformity research, this review emphasizes the ways in which these goals interact with external forces to engender social influence processes that are subtle, indirect, and outside of awareness.

CONTENTS

INTRODUCTION	591
COMPLIANCE	592
Goal of Accuracy	592
Goal of Affiliation	598
Goal of Maintaining a Positive Self-Concept	602
CONFORMITY	606
Goal of Accuracy	606
Goal of Affiliation	609
Goal of Maintaining a Positive Self-Concept	611
CONCLUSION	613

INTRODUCTION

The study of social influence is renowned for its demonstration and explication of dramatic psychological phenomena that often occur in direct response to overt social forces. Some of the most memorable images from the field's history depict participants struggling to comprehend their circumstances and to respond in accordance with their private judgments in the face of external pressures to do otherwise. These images include a middle-aged gentleman nearly brought to hysterics by a stranger in a lab coat, as exhibited in Milgram's (1974) work on obedience to authority. They also include that bespectacled and rather befuddled young man

in Asch's (1956) line-judgment conformity experiments, whose perceptions pitted the likelihood of an incorrect consensus against the likelihood of an incorrect eyeglass prescription. In these classic illustrations, the targets of influence were confronted with explicit social forces that were well within conscious awareness. In contrast, Freedman & Fraser's (1966) seminal investigation of the foot-in-the-door technique, an example of compliance gaining without overt pressure, revealed the subtler aspects of social influence. Although all three lines of research have been prominent in stimulating decades of insightful inquiries into the nature of compliance and conformity, scholars in recent years have been inclined to explore topics more in line with the latter approach; that is, researchers have tended to concentrate their efforts on examining social influence processes that are subtle, indirect, and nonconscious.

The social-cognitive movement has also reverberated throughout contemporary influence research, as investigators attempt to uncover the ways in which targets' implicit and explicit goals affect information processing and decision-making in influence contexts. As an organizational framework, this chapter focuses on the extent to which three central motivations—to be accurate, to affiliate, and to maintain a positive self-concept (see also Cialdini & Trost 1998, Wood 2000)—drive targets' cognitions and behaviors in the areas of compliance and conformity. We place a special emphasis on scholarly work published between 1997 and 2002.

COMPLIANCE

Compliance refers to a particular kind of response—acquiescence—to a particular kind of communication—a request. The request may be explicit, as in the direct solicitation of funds in a door-to-door campaign for charitable donations, or it may be implicit, as in a political advertisement that touts the qualities of a candidate without directly asking for a vote. But in all cases, the target recognizes that he or she is being urged to respond in a desired way.

Goal of Accuracy

Stated simply, people are motivated to achieve their goals in the most effective and rewarding manner possible. A person's desire to respond appropriately to a dynamic social situation demands an accurate perception of reality. The need to correctly interpret and react to incoming information is of paramount importance, particularly to targets of compliance-gaining attempts. One inaccurate perception, cognition, or behavior could mean the difference between getting a bargain and being duped. A great deal of recent compliance research has investigated how targets of various influence techniques process information and respond to requests as they attempt to gain an accurate construal of the situation and respond accordingly.

AFFECT AND AROUSAL Much of the compliance research on arousal and affective states has focused on the effect of discrete emotions on targets' cognitions as well

as on the eventual outcome of the influence attempt. After receiving a request, targets use their feelings as cues for effective responding. For example, Whatley et al. (1999) differentiated between the emotions and related goals associated with public and private compliance in response to a favor. They posited that individuals avoid or alleviate feelings of shame and fear via public compliance, and guilt and pity via private compliance. Several other researchers have also focused on the impact of targets' actual or anticipated guilt on compliance (e.g., Boster et al. 1999; O'Keefe & Figgé 1997, 1999; Rind 1997; Tusing & Dillard 2000). In addition, investigators have explored the influence of mere arousal, finding that the simple arousal elicited by performing an interesting task enhances the likelihood of compliance with a request (Rind 1997, Rind & Strohmetz 2001).

Searching for a broader perspective on the role of affect in compliance scenarios, Forgas (1998a) argued that the conditions under which affect mediates the processing of and responses to requests can be explained by the affect infusion model (AIM; Forgas 1995). The AIM contends that a target's mood will permeate the processing of a request to the extent that the processing is effortful and exhaustive (Forgas 1995, 1998a). That is, an individual's affective state is likely to be integrated into the processing of the request in situations that call for constructive elaboration of "the available stimulus information, require the activation and use of previous knowledge structures, and result in the creation of new knowledge from the combination of stored information and new stimulus details" (Forgas 2001, p. 152). Forgas (1998a) suggested that the processing of a request will be more sensitive to mood if the appeal is unconventional (requiring more substantive processing), and rather impervious to mood if it is conventional. Combined with other findings demonstrating the role of the AIM in influencing the communication and bargaining strategies employed by compliance requesters (Forgas 1999) and negotiators (Forgas 1998b), the evidence as a whole appears to validate the notion that mood effects in compliance scenarios are mediated by both the targets' and requesters' levels of information processing.

The AIM, like many other theories of affect and cognition, focuses on processes that occur while an individual is experiencing a transient emotion or set of emotions. Dolinski & Nawrat (1998) established the success of a technique designed to increase compliance immediately after a particularly arousing mood has subsided. In one demonstration of their fear-then-relief procedure, a card matching the general appearance of a parking ticket was placed either under a windshield wiper (commonly where parking tickets are found) or on a door of illegally parked cars in Poland. The cards placed on the door were advertisements (No Anxiety), whereas the windshield wiper cards were either fake parking tickets (Anxiety) or advertisements (Anxiety-then-Relief). Drivers who experienced apprehension followed by assuagement were more likely to comply with a request than those who continued to be anxious or those never made anxious in the first place. The authors suggested that fear-then-relief participants behaved in a relatively mindless manner, caused by a diversion of resources to cognitions and counterfactuals regarding the fear-provoking event.

THAT'S-NOT-ALL TECHNIQUE As in the fear-then-relief procedure, targets in compliance situations are often burdened with the task of correctly comprehending, evaluating, and responding to requests in a relatively short time, and therefore lack the luxury of entirely deliberate and rational decision-making. One strategy commonly employed by sales professionals that takes advantage of people's limited abilities to make well-reasoned judgments is the that's-not-all technique (TNA; Burger 1986). Influence agents utilize this technique by presenting a target with an initial request, followed by an almost immediate sweetening of the deal—either by reducing the cost or by increasing the benefits of compliance—before the message recipient has an opportunity to respond. Although obligations to reciprocate the solicitor's generosity have been shown to be at least partially responsible for the effect in some situations, Burger advanced a second, broader explanation for the phenomenon based on the contrast between the two requests and shifting anchor points (see Burger 1986).

Researchers have recently resumed the pursuit of understanding the processes that mediate the technique's efficacy, seeking to clarify the psychological mechanisms at work through an exploration of the tactic's limitations. For example, Burger and colleagues (1999) demonstrated that the procedure could backfire when the original request is too costly or demanding. Although the evidence is indirect, the authors suggest that both these and earlier (Burger 1986) findings are congruent with the theory that the initial request modifies the anchor point individuals use when deciding how to respond to the more attractive request. Thus, by first elevating a prospective customer's anchor point, the salesperson increases the likelihood that the better deal will fall into a range of acceptance that is based on this higher anchor point (Burger 1986, Burger et al. 1999). In the case of an unreasonably large initial request, the excessively high anchor value may be perceived as completely out of the range of acceptance, leading to immediate rejection even before the solicitor has a chance to revise the request (Burger et al. 1999).

Pollock et al. (1998) suggested an alternative account for the original TNA findings. They contended that TNA procedures succeed because potential customers mindlessly act on counterfactuals that create the appearance of a bargain. These authors reported results consistent with the position that the success of the TNA tactic is at least partially due to individuals' mindless consideration of the deal. However, their research did not provide a direct test of their account against the modified anchor point explanation, and the Pollock et al. mechanism alone does not explicitly predict the boomerang effect found by Burger et al. (1999).

RESISTANCE Following the work of Pollock et al. (1998), some researchers have placed the that's-not-all tactic among a class of influence strategies referred to as disrupt-then-reframe techniques (DTR; Davis & Knowles 1999, Knowles & Linn 2003). The DTR technique operates by disrupting an individual's understanding of and resistance to an influence attempt and reframing the persuasive message or request so that the individual is left more vulnerable to the proposition (Davis &

Knowles 1999). The procedure is thought to work by disturbing the evaluation stage of Gilbert's (1991) two-stage model for message and situation comprehension (Knowles & Linn 2003). In the initial demonstration of the strategy, Davis & Knowles (1999) went door-to-door selling holiday cards for \$3. In addition to a control condition ("They're three dollars"), the sales pitch included a disruptive element ("They're three hundred pennies"), a reframing element ("It's a bargain"), or various permutations of these possibilities. The researchers found increased compliance relative to the control only in the disrupt-followed-by-reframe condition ("They're three hundred pennies . . . that's three dollars. It's a bargain."), suggesting that a target's general, high-order representation of the event ("I am being solicited") must be disturbed before the issue can be reframed ("It's a bargain") for the target. Knowles and colleagues suggest that the that's-not-all technique is a special case of DTR in which the revision of the original request serves as the disruption; the reframing ("It's a bargain") is implicit rather than explicit (Davis & Knowles 1999, Knowles & Linn 2003).

The disrupt-then-reframe tactic enhances the likelihood of compliance by suppressing the target's resistance processes rather than by directly bolstering the desirability of request fulfillment. Knowles & Linn (2003) argue that forces drawing targets away from compliance (omega forces) in any given circumstance may be of a qualitatively different nature than those driving them toward compliance (alpha forces). Investigations of the processes associated with alpha strategies of influence are ubiquitous in the literature (see Cialdini 2001), whereas omega strategies have been quite underserved (Knowles & Linn 2003, Sagarin et al. 2002). Researchers do not yet fully understand how these processes function together in influence settings. Thus, the area is likely to draw considerable attention in the future.

AUTHORITY AND OBEDIENCE Individuals are frequently rewarded for behaving in accordance with the opinions, advice, and directives of authority figures. Authorities may achieve their influence via several distinct routes, first articulated by French & Raven (1959) in their seminal work on the bases of social power. Although the universe of power bases has been challenged, modified, and updated considerably over the years (see Koslowsky & Schwarzwald 2001), the distinction between authority based on one's expertise and authority derived from one's relative position in a hierarchy has remained relevant in differentiating mere compliance from what is commonly referred to as obedience. In more recent analyses of the many forms of influence at the disposal of authorities and other agents, researchers have categorized strategies employing expert power in a class called *soft tactics* and approaches utilizing hierarchy-based legitimate power in a class known as *harsh tactics* (Koslowsky et al. 2001, Raven et al. 1998). More generally, soft influences originate from factors within the influence agent (e.g., credibility), whereas the power of harsh influences is derived externally by means of an existing social structure (cf. Koslowsky & Schwarzwald 2001).

Several studies have examined the use of authority and power within organizational settings. For example, supervisors' usage of primarily soft strategies has been found to correlate positively with subordinates' job satisfaction ratings, whereas there are indications that the reverse may be true when predominantly harsh tactics are employed (Koslowsky et al. 2001, Raven et al. 1998). Authorities who demonstrate consideration for their subordinates' needs—as opposed to those who exploit power differences—are also likely to engender a more favorable compliance rate (Schwarzwald et al. 2001). Moreover, because the level of volition associated with compliance is a function of the quality of the treatment subordinates receive (Tyler 1997), authorities stand to benefit greatly by treating subordinates with fairness and respect. However, it should be noted that the success of an authority's use of nonforceful measures may actually be augmented by the additional use of forceful means, so long as the attitudinal compliance brought about by the nonforceful influence attempt is not undermined (Emans et al. 2003). In support of this notion, Emans et al. (2003) showed that supervisors whose compliance-gaining repertoires included the use of both forceful and nonforceful techniques were most likely to elicit compliance with their requests.

Most organizations would cease to operate efficiently if deference to authority were not one of the prevailing norms. Yet, the norm is so well entrenched in organizational cultures that orders are regularly carried out by subordinates with little regard for potential deleterious ethical consequences of such acts (Ashford & Anand 2003, Brief et al. 2001, Darley 2001). Personnel managers, for instance, may discriminate based on race when instructed to do so by an authority figure (Brief et al. 1995), particularly those who are high in Right-Wing Authoritarianism (Petersen & Dietz 2000).

One illustration of destructive organizational obedience frequently cited by social psychologists is the systematic murder of millions of innocent people during the Holocaust. Over the years, it has been common practice for researchers, teachers, and textbook authors to refer to Stanley Milgram's (1974) groundbreaking work on obedience to authority as demonstrative of the principles and processes underlying the behaviors of seemingly ordinary German citizens (Miller 1995). A number of scholars have argued that such portrayals misrepresent the true nature of perpetrator behaviors in the Holocaust. They point to numerous differences between the obedience demonstrated in the Milgram experiments and the wanton and deliberate cruelty practiced by many concentration camp executioners. For example, whereas it is clear that Milgram's participants were emotionally and attitudinally in opposition to the orders they were given, many of the Holocaust atrocities were committed willingly and often quite sadistically (Berkowitz 1999, Goldhagen 1996). Others have stressed that, unlike Nazi order-givers, the experimenter in the Milgram studies possessed not only legitimate authority, but expert authority as well (Blass 1999, Darley 1995, Lutsky 1995; but see Elms 1995). Although the movement to redress this growing concern is gaining considerable momentum, Milgram's experiments in particular (e.g., Miller 1995), and social psychology in general (see Darley et al. 2001, Newman & Erber 2002), still

provide much insight into the production and perpetuation of obedience-related malfeasance within hierarchically based organizations.

It is noteworthy that few studies of obedience to authority both utilize experimental designs and employ behavioral dependent measures. This trend is likely the result of ethical constraints placed on researchers working with human subjects (Elms 1995). One somewhat feasible alternative to ethically questionable obedience experiments is active role-playing (Meeus & Raaijmakers 1995). This method is characterized by physically placing role-players in the position of a would-be participant, and asking them to demonstrate how they believe a genuine participant would act if the circumstances were real.

The Milgram studies revealed the potentially harmful consequences of an illegitimate authority posing as a legitimate authority. Similarly, previous research has shown that we are also susceptible to those feigning expertise, largely due to our use of heuristics (see Cialdini 2001) and our perceptions of invulnerability to such duplicitous manipulations (Sagarin et al. 2002). Sagarin et al. (2002) found that the most effective treatment for instilling resistance to ads containing spurious experts was one that demonstrated participants' vulnerability to the ads, followed by simple rules for identifying fraudulent experts.

SOCIAL NORMS In addition to authorities, individuals often look to social norms to gain an accurate understanding of and effectively respond to social situations, especially during times of uncertainty (Cialdini 2001). Social norms have been found to influence a range of behaviors in a myriad of domains, including recycling (Schultz 1999), littering (Kallgren et al. 2000), and tax evasion (cf. Kahn 1997). Cialdini and colleagues (e.g., Cialdini et al. 1991) have argued that a close examination of the seemingly inconsistent literature on norms and their impact on behavior yields a meaningful distinction between norms that inform us about what is typically approved/disapproved (injunctive norms) and those that inform us about what is typically done (descriptive norms). The impact of these social norms on both subtle behavior-shaping and more overt compliance-gaining will be determined by the extent to which each of the norms is focal (Kallgren et al. 2000) and the degree to which the different types of norms are in alignment (Cialdini 2003).

Investigators have corroborated the findings of earlier research that relevant norms direct behavior only when they are in focus. This is true not only for norms outside of the self, but for personal norms as well; for example, the strength of individuals' personal norms against littering predicted littering behaviors only when these individuals focused attention on themselves rather than on external stimuli (Kallgren et al. 2000). Taken together, the results suggest that one's actions are relatively unaffected by normative information—even one's own—unless the information is highlighted prominently in consciousness.

Given that relevant norms must be salient in order to elicit the proper norm-congruent behavior, individuals attempting to persuade others to engage in a particular behavior face the dual challenge of making the norm salient not only

immediately following message reception, but in the future as well. Cialdini and associates (R.B. Cialdini, D.W. Barrett, R. Bator, L. Demaine, B.J. Sagarin, K.L.v. Rhoads, & P.L. Winter, paper in preparation) maintain that the long-term efficacy of persuasive communications such as public service announcements is threatened because normative information becomes less accessible over time. They hypothesized and experimentally confirmed that linking an injunctive normative message to a functional mnemonic cue would increase norm accessibility later by activation of the norm upon perception of the same or a similar cue.

Goal of Affiliation

Humans are fundamentally motivated to create and maintain meaningful social relationships with others. For example, implicit in the concept of injunctive norms is the idea that if we engage in behaviors of which others approve, others will approve of us, too. Accordingly, we use approval and liking cues to help build, maintain, and measure the intimacy of our relationships with others. We also move closer to achieving these affiliation-oriented goals when we abide by norms of social exchange with others, such as the norm of reciprocity.

LIKING One of the clearest implications of our desire to affiliate with others is that the more we like and approve of them, the more likely we are to take actions to cultivate close relationships with them. This may be accomplished via a number of means, including responding affirmatively to requests for help. Indeed, the social influence literature is rife with demonstrations of the positive relationship between our fondness for a person and the likelihood of compliance with his or her request (Cialdini & Trost 1998). For example, physical attractiveness, a predictor of interpersonal liking, has been demonstrated to influence responding in a number of domains, ranging from tip earnings (Lynn & Simons 2000) to the likelihood of being asked for identification in bars (McCall 1997).

Researchers have focused recently on the extent to which heuristics—which generally provide accurate shortcuts for effective decision-making—lead individuals to respond to strangers in ways that belie the absence of a truly meaningful relationship between them. Because we so often rely on the heuristic rule that the more we like someone with whom we have an existing relationship, the greater should be our willingness to comply with the request, we tend to use the rule automatically and unwittingly when the request comes from strangers, as well (Burger et al. 2001). This is even more likely the case under the burdens of a heavy cognitive load, such as when the request is made face-to-face and is unexpected. Burger et al. (2001) found that simply being exposed to a person even for a brief period without any interaction substantially increased compliance with that person's request. In addition, greater perceived similarity—another cue for potential friend- or acquaintanceship—has been demonstrated to lead to enhanced compliance, even when the apparent similarities are based on superficial matches such as shared names, birthdays, and even fingerprint types (Burger et al. 2001,

2003). Some caution is warranted in generalizing these results to both genders, however, because nearly all of the participants were female. Because of the tendency of females to be more relationship-oriented than males (Cross & Madson 1997), there is reason to believe that these effects may be stronger among women than men.

Dolinski et al. (2001) also argued that certain situational cues activate heuristics that lead us to treat strangers as if they were friends or acquaintances. The authors contend that scripts for dealing with strangers or with friends and acquaintances are activated by the particular mode of communication in which we are engaged. Specifically, we tend to associate monologues with strangers and dialogues with closer relationships. In a series of studies, Dolinski and his colleagues showed that simply engaging people in a short, trivial dialogue prior to making the target request was sufficient to elevate compliance relative to a monologue condition (“Hi. I hope you are fine today”). Although the findings suggest that dialogue engagement can be an effective component of an influence agent’s request, topics of high involvement are likely to be processed more actively and responded to more deliberately than those of low involvement, allowing for the possibility of a backfire effect (Dolinski et al. 2001).

Impression management through ingratiation is another means by which individuals utilize the liking principle for maximal influence. Research has demonstrated that even subtle forms of ingratiation, such as remembering a person’s name (Howard et al. 1995, 1997), can potentially shape that person’s response to a request. A great deal of the previous ingratiation research, in large part focusing on the effects of flattery, made use of an experimental paradigm in which targets’ and observers’ judgments of the ingratiation could be compared (Gordon 1996, Vonk 2002). Investigators have found that targets of ingratiation tend to view the ingratiation more positively than do onlookers (Gordon 1996). The traditional explanation for the target-observer difference has been that the target is motivated to accept the obsequious comments as genuine praise in order to serve his or her self-esteem. Observers, on the other hand, can analyze the behavior more critically (e.g., account for possible ulterior motives) because their feelings of self-worth are not on the line (Vonk 2002). Once the target has uncritically accepted the ingratiation’s intentions as wholly good-natured, greater affinity for the adulator follows and leads to increased compliance. Although principles of self-enhancement and liking are doubtless components of the link between compliments and compliance, the norm of reciprocity may be another. In some cases, the recipient of a laudatory remark may comply out of a sense of indebtedness and obligation to the ingratiation, a hypothesis that remains open to empirical study.

RECIPROCATION The norm of reciprocity—the rule that obliges us to repay others for what we have received from them—is one of the strongest and most pervasive social forces in all human cultures (Gouldner 1960). It helps us build trust with others and pushes us toward equity in our relationships (Kelln & Ellard 1999). The rule tends to operate most reliably in public domains, but is so deeply

ingrained in most individuals via socialization that it powerfully directs behavior in private settings as well (Whatley et al. 1999). The influence of obligations to reciprocate has also been shown in commercial exchanges. For example, numerous studies have demonstrated the ability of service workers to harness the potency of the norm to boost their tip earnings (e.g., Rind & Strohmetz 1999, Strohmetz et al. 2002; see also Cialdini & Goldstein 2002).

DOOR-IN-THE-FACE TECHNIQUE The norm of reciprocity has also been used to explain the effectiveness of the door-in-the-face technique (DITF; Cialdini et al. 1975). Briefly, one employs the strategy by preceding the request for a truly desired action with a more extreme request that is likely to get rejected. Cialdini et al. (1975) explained the phenomenon in terms of reciprocal concessions, arguing that the target feels a normative obligation to reciprocate the influence agent's concession with a concession of his or her own; specifically, this is accomplished by moving from a position of noncompliance to one of compliance. Accordingly, the success of the strategy hinges on the target's perception that the requester has made a legitimate concession (Cialdini et al. 1975). Researchers have repeatedly found that this rejection-then-moderation procedure produces a significant increase in compliance with the target request (Cialdini & Trost 1998; for meta-analyses, see O'Keefe & Hale 1998, 2001).

The reciprocal concessions explanation of the DITF phenomenon had been challenged periodically over the years (e.g., Dillard et al. 1984, Fern et al. 1986), but it seems there has been a recent resurgence of attempts to account for the data with alternative theories. Some researchers have pointed to meta-analytic findings that the size of the concession is not a significant predictor of compliance in the DITF paradigm (see Fern et al. 1986; O'Keefe & Hale 1998, 2001), which suggests that this violates one of the core predictions laid out by a reciprocal concessions model (O'Keefe & Figgé 1997, 1999; O'Keefe 1999; Tusing & Dillard 2000). However, according to the original explanation put forth by Cialdini et al. (1975; see also Hale & Laliker 1999), because the target's choice is a dichotomous one—yes or no—the reciprocal concessions account predicts that any retreat sizeable enough to be perceived as a genuine concession will activate the mechanism for a concession in return. Thus, once a certain threshold is met and the target interprets the requester's move as an authentic concession, increasing the difference between the sizes of the requests would have little effect on the outcome. O'Keefe (1999) argued against this explanation, positing that the existence of systematic variation in participants' personal thresholds would suggest that meta-analyses surveying a large number of studies should record at least somewhat of an advantage for DITF conditions employing larger concessions. Even if this were the case, however, most individual studies (and the meta-analyses that summarize them) have not been equipped to measure directly one key feature of the reciprocal concessions explanation: that is, whether participants perceived a genuine concession in the move to the second request.

The emphasis on authenticity of the concession is not limited only to the target's perception that the second request is truly less demanding than the initial request;

authenticity also refers to the target's beliefs regarding the requester's motives. That is, individuals in a DITF scenario will be less likely to fall victim to the technique when they have reason to suspect that the requester is employing a sales device (Mowen & Cialdini 1980). Some authors (O'Keefe & Figgé 1997, Tusing & Dillard 2000) have argued that the reciprocal concessions explanation does not speak to findings that the DITF strategy tends to be more effective when the requests are prosocial in nature (Dillard et al. 1984; O'Keefe & Hale 1998, 2001). However, the foregoing analysis suggests that targets will be more likely to question the influence agent's motives, to perceive the apparent concession as illegitimate, and consequently, to refuse to comply when the request involves noncharitable causes. These assertions are consistent with the reciprocal concessions approach to the DITF.

Several investigators have also claimed that the originally proposed model is not supported because it is silent with respect to the effect of delay between requests (Dillard et al. 1984, Dolinski et al. 2001). Yet, the reciprocal concessions explanation does indeed predict that a greater time lapse between requests will lead to a less successful outcome, a finding reported in meta-analyses (see O'Keefe & Hale 1998, 2001). Longer delays may reduce the perception that the second request is a genuine concession, either by increasing the likelihood that the target will infer an ulterior motive on the part of the requester, or by making the smaller request seem more like a separate request rather than a concession (see Mowen & Cialdini 1980). Furthermore, contrary to the assertions of Dolinski et al. (2001), there is some evidence that the obligation individuals feel stemming from the norm of reciprocity does in fact diminish over time, at least for small favors between strangers (e.g., Burger et al. 1997). Thus, targets should feel less compelled to reciprocate a concession—even when made in earnest—with a concession of their own as the time between the two requests grows longer.

O'Keefe & Figgé (1997, 1999; see also Tusing & Dillard 2000) proposed an alternative account for the DITF effect based on guilt. They contend that targets feel guilty after rejecting the initial request, and seek to mollify this negative affect by agreeing to fulfill the subsequent request. Millar (2002) demonstrated the potential power of guilt in DITF exchanges by manipulating the degree to which guilty feelings were induced by the rejection of the larger request and reduced by the acceptance of the smaller request. The author found superior compliance rates in the condition characterized by high guilt induction and high guilt reduction. Yet, if individuals are primarily motivated to live up to the standards made salient to them once they have refused the initial appeal and to reduce feelings of guilt, one would expect that compliance with the second request would be equally effective at fulfilling these goals irrespective of the person making the second request (Dolinski et al. 2001). However, the evidence clearly demonstrates that the DITF technique ceases to be effective when a different person makes the second request (Cialdini et al. 1975; O'Keefe & Hale 1998, 2001), a finding that substantially weakens the social responsibility/guilt reduction explanation.

Dolinski et al. (2001) posited their own account of the DITF, suggesting that mere dialogue involvement may be responsible for the technique's success.

According to the dialogue involvement model, simply engaging in the initial exchange should promote a target's willingness to comply with the influence agent's subsequent request. This explanation, however, is not supported by research revealing that the strategy is no longer successful when the second request is the same size as the first (e.g., Cialdini et al. 1975).

Taken as a whole, it appears that recently proposed explanations for the DITF effect are not fully consistent with the available data. This is not to say that multiple factors never operate in DITF exchanges, nor is it likely that the compulsion to reciprocate a genuine concession is the driving force behind the strategy's efficacy in every case. Rather, it is probable that potential mediators such as self-presentation, perceptual contrast, dialogue involvement, social responsibility, and guilt reduction may function at some level in DITF scenarios. However, the data provided by the extant literature still appear to favor a reciprocal concessions-based account as one of the leading mechanisms underlying observed DITF effects.

Goal of Maintaining a Positive Self-Concept

People have a strong need to enhance their self-concepts by behaving consistently with their actions, statements, commitments, beliefs, and self-ascribed traits (Cialdini & Trost 1998). This notion provides the basis for much of the recent research on compliance, particularly with regard to the role of self-perception processes.

FOOT-IN-THE-DOOR TECHNIQUE One compliance strategy designed to take advantage of people's basic desire for consistency is the foot-in-the-door technique (FITD; Freedman & Fraser 1966). The procedure involves first asking a target individual to comply with a small request, typically one that is minimally invasive so that the target is almost certain to respond affirmatively. After securing compliance, either the initial requester or an associate of the requester makes a larger, often related request. The strategy is considered effective when the demanding task's compliance rates are superior for those who received the initial request as compared to those who received no earlier request. Freedman & Fraser (1966) speculated that a major process underlying the FITD effect is one akin to self-perception (Bem 1972). That is, after agreeing to the initial request, targets ascribe traits to themselves reflecting their recent actions, and this change in self-view helps direct future compliance. There has been much debate regarding the mediators of the effect.

Although researchers have argued that self-perception cannot account for all of the FITD findings (see Dillard et al. 1984), the explanation has received much empirical support, albeit often of an indirect nature (for a meta-analysis, see Burger 1999). For example, Burger & Guadagno (2003) found indirect support for self-perception as a mediator of the FITD effect in their investigation of self-concept clarity. Self-concept clarity is an individual difference measure that gauges the extent to which a person's self-concept is, among other things, accessible (cf. Burger & Guadagno 2003; see also Campbell et al. 1996). Based on the finding

that it is easier to manipulate the self-views of those whose self-concepts are more readily accessible (R.E. Guadagno & J.M. Burger, paper in preparation), Burger & Guadagno (2003) predicted that only those with clearer self-concepts would succumb to FITD; the results generally supported the hypothesis and were congruent with a self-perception account of FITD effects. Burger's meta-analysis (1999) of 30 years of FITD investigations yielded a number of other findings consistent with a self-perception explanation. Among them are that targets are more likely to comply with the second request when the initial appeal is behaviorally fulfilled (or at least attempted; see Dolinski 2000), and less likely to comply when the first request is so large that nearly everyone refuses.

Gorassini & Olson (1995) have challenged the assertion that self-perception processes could fully account for the efficacy of the FITD tactic. They noted that because nearly all of the previous research on the topic failed to measure changes in self-perception directly, valid conclusions regarding self-perception as a mediator could not be drawn. In an experiment using private compliance as the dependent variable—a measure more sensitive to mediation by self-perception processes than public compliance—the researchers found that increases in participants' perceptions of their own helpfulness following fulfillment of an initial request did not lead to increased compliance with a second request. Employing somewhat more sensitive and reliable measures of self-perception change, Burger & Caldwell (2003) conducted a conceptually similar study, and found that participants' compliance rates were in fact mediated by one dimension of a self-rated helpfulness scale administered immediately after the initial compliance. One possible explanation for these discrepant outcomes is that situational variables within each set of experiments may have motivated participants to be consistent with their own trait attributions to different extents; individual differences may have played a role as well.

Cialdini et al. (1995) argued that dispositional tendencies toward consistent responding might moderate the degree to which individuals behave in line with predictions made by consistency theories; they developed the Preference for Consistency (PFC) scale to measure such a construct. The researchers showed that only those who scored high on the PFC scale complied in accordance with consistency-based theories, including FITD. They concluded that individuals high in PFC are more consistent than those low in PFC in that they are more likely to determine their reactions to novel stimuli by relating the incoming information to already established information, such as pre-existing attitudes, prior behaviors, and commitments. Guadagno et al. (2001) found that focusing low-PFC participants on their prior helpfulness actually reduced the likelihood of their compliance on the subsequent request. The authors suggest that those low in PFC may have exhibited the backfire effect because they have a greater desire to act inconsistently with previous behaviors, specifically when those prior actions have been made salient.

Together, these findings both bolster the notion of self-perception as a mediator of the FITD effect and suggest its potential limitations (Guadagno et al. 2001). The results of these studies indicate that simply engaging in self-perception processes may not be sufficient to produce the FITD effect; rather, one must also have the

motivation to be consistent with this self-view (Cialdini et al. 1995, Gorassini & Olson 1995, Guadagno et al. 2001).

Since the technique's initial demonstration, the archetypical foot-in-the-door study has involved observing an individual's response to a truly desired request after the person not only attempts, but also successfully completes, an initial task. However, Dolinski (2000) demonstrated that the self-inference process could operate to produce a significant FITD effect even in situations in which one's earnest attempt to fulfill a request fails. He concluded that the focus of our self-inferences is on the processes associated with the compliance attempt itself, rather than on the outcome of that attempt.

It is also noteworthy that Dolinski (2000) found that both those who succeeded and those who failed to accomplish the initial favor tended to rate themselves as more submissive, but not more altruistic, than controls when surveyed later. This is inconsistent with the results of Gorassini & Olson (1995), in which an increase in self-rated helpfulness, but no parallel increase in self-rated submissiveness, was found in a strong FITD manipulation versus a control condition. Furthermore, Burger & Caldwell (2003) found that enhanced compliance was related to the Providing Support dimension of participants' self-rated helpfulness scores, and not those related to Volunteering or Feeling Compassion. Although the disparities in self-rating scores across these three studies are less than comparable because of their measurement as well as methodological differences, it nonetheless underscores the fact that researchers have yet to uncover the exact nature of the self-inferences that lead individuals to comply with a subsequent request. Future consideration should be given to the investigation of the extent to which individuals are focusing on each of three domains—their general dispositions, their actions, or their attitudes toward relevant issues (Burger & Caldwell 2003)—when undergoing self-perception processes in compliance situations.

Of course, self-perception and consistency motives may not be the only processes mediating FITD, nor may they even be the strongest (Burger & Caldwell 2003). Burger (1999) identified several other variables that had bearing on the size and direction of FITD effects, such as conformity, attributions, and commitments. In addition, certain factors may cause boomerang effects. For instance, resistance is especially likely if the same person makes both requests with little or no delay in between, presumably because the norm of reciprocity dictates that after the target agrees to a request, it would be out of turn for the influence agent to make a new one (Burger 1999, Chartrand et al. 1999). It is quite possible, for example, that Gorassini & Olson (1995) found no increase in private compliance in the FITD condition—despite an increase in self-rated helpfulness—because the same individual (i.e., the experimenter) made both requests within a relatively short period of time, thereby instigating norm-based resistance to compliance with the second request.

CONSISTENCY AND COMMITMENT Individuals are driven to be consistent not only with their trait self-attributions, but with their previous behaviors and commitments as well. The extent to which one's commitments are made actively is one powerful

determinant of the likelihood of request compliance (Cialdini & Trost 1998). For example, Cioffi & Garner (1996) solicited volunteers for an AIDS awareness project by asking participants to indicate their decisions on a form in either an active or passive manner. Irrespective of their choice, participants who made an active rather than a passive choice took a more extreme position toward their decision (even weeks later) and were more likely to show up if they had agreed to volunteer. In support of a self-perception analysis of active commitments, the authors found that more effortful displays of one's choice spurred individuals to attribute their decisions to their traits, attitudes, and tendencies (as opposed to self-presentational concerns) to a much greater extent than those who made passive commitments.

Public commitments also tend to be more persistent than private commitments (Cialdini & Trost 1998). Car salespeople regularly utilize strategies, such as the low-ball technique, that take advantage of our motivation to act consistently with our prior public commitments. An influence agent employing this tactic first offers an acceptable deal to the target. Once a target's commitment to the proposal has been secured, the cost of carrying out the deal is substantially increased (Cialdini et al. 1978). In the case of car sales, the technique is successful because prospective buyers face their own commitments to the requester and perhaps to themselves when deciding whether or not to accept the modified deal. The success of the low-ball technique has been demonstrated among equal-status laypeople in nonconsumer domains as well (e.g., Guégen et al. 2002). Burger & Cornelius (2003) revealed that the public nature of the commitment is the keystone of the low-ball technique's efficacy. They found that relative to a control request, a low-ball procedure eliciting a public commitment demonstrated enhanced compliance, whereas compliance rates declined when the requester made no attempt to obtain a public commitment before revealing the true cost of request fulfillment.

A core assumption regarding the success of consistency-based compliance techniques is that targets act consistently with their self-views and prior commitments in order to serve the ultimate motivation of maintaining or enhancing their self-esteem. It stands to reason, then, that individuals whose cultures place less of an emphasis on self-concept positivity and related maintenance and enhancement goals (such as Japan; for a review, see Heine et al. 1999) may be less susceptible to tactics that exploit these motivations. Furthermore, the importance and meaning of self-consistency as a general notion varies considerably among different cultures. For example, in cultures characterized by greater levels of interdependence, people are more likely to view their actions as being driven by their roles and others' expectations rather than by internal attributes (cf. Heine & Lehman 1997). In a demonstration of this principle, Cialdini et al. (1999) examined in two cultures the degree to which compliance decisions are steered by the desire to act in accordance with one's prior responses to comparable requests. They found that consistency needs had a greater influence on participants in an individualistic country (the United States) than in a collectivistic country (Poland); it is notable, however, that these differences were in large part due to participants' personal individualistic-collectivistic orientations. Because much of the field's knowledge

of compliance is primarily based on North American participants, future research in this area is necessary to redress this imbalance.

CONFORMITY

Conformity refers to the act of changing one's behavior to match the responses of others. Nearly half a century ago, Deutsch & Gerard (1955) distinguished between informational and normative conformity motivations, the former based on the desire to form an accurate interpretation of reality and behave correctly, and the latter based on the goal of obtaining social approval from others. The extant literature has upheld the conceptual independence of each of these motivational factors (see Cialdini & Trost 1998), although the two are interrelated and often difficult to disentangle theoretically as well as empirically (David & Turner 2001). In addition, both accuracy- and affiliation-oriented goals act in service of a third underlying motive to maintain one's self-concept, both via self-esteem protection as well as self-categorization processes.

Goal of Accuracy

Research on accuracy as a central motivation for conformity has examined the phenomenon in some diverse and relatively unexplored domains. Investigators, for example, have demonstrated that individuals may conform to information supplied by a group of confederates when reconstructing their memories for stimuli (Meade & Roediger 2002, Walther et al. 2002, Wright et al. 2000). As another example, Castelli et al. (2001) explored the types of people we look to for valid information under uncertainty. They showed that participants were more likely to conform to (and implicitly view as more accurate) the objective estimates of a confederate who earlier used stereotype-consistent (versus stereotype-inconsistent) traits to describe an outgroup member, even though they publicly expressed little faith in the confederate's judgments.

Quinn & Schlenker (2002) proposed that a strong accuracy goal could counteract the normative pressures individuals face when making a decision for which they are accountable (i.e., must be prepared to explain their decision) to a set of people whose views on the issue are known. The dominant response of individuals in this situation is to conform to the audience's position (Lerner & Tetlock 1999, Pennington & Schlenker 1999), a consequence that often stems from the desire to gain the approval of the people to whom the individuals are answerable (Quinn & Schlenker 2002). The authors theorized that because being accountable for one's actions tends to highlight the importance of the task (Lerner & Tetlock 1999) and amplify the salience of one's goals irrespective of the orientations of those goals (Schlenker & Weigold 1989), only those primed with a motivation to make accurate decisions and who were held accountable for their judgments would resist pressures to conform to the audience's known but flawed decision. The results confirmed the hypothesis. Although participants in this study were accountable to

only a single individual, it does suggest conditions characterized by accountability and salient accuracy goals may create the most suitable environment for the promotion of independent decision-making, even in cases in which the individual is accountable to an entire group of people and the consensus for an opposing position is high.

PERCEIVED CONSENSUS How we react to beliefs held by others is often contingent on our perceptions of the level of consensus for those beliefs. Social psychologists have continued to investigate how individuals differentially process messages associated with numerical majorities and minorities and to explore the extent to which normative and informational influences govern motivations to conform to each type of source. The two most prominent theories, Moscovici's (1980) conversion theory and Mackie's (1987) objective consensus approach, differ in their interpretation of the influences exerted by majorities and minorities in terms of cognitive and motivational processes. Simply put, conversion theory suggests that majority influence is normative, whereas the objective consensus account views it as informational.

Recently, Erb et al. (2002) addressed this apparent incompatibility by considering individuals' prior attitudes toward the relevant influence topic. The researchers found that when the target's previously formed opinion is strongly opposed to the message being conveyed, the recipient's motivation to avoid deviance from the majority group will hamper message elaboration (unless a target's self-interest is specifically threatened) (Martin & Hewstone 2001) and instead focus the individual on the normative concerns of fitting in, a process consistent with conversion theory. On the other hand, when recipients hold moderately opposing attitudes toward the message topic, they are more receptive to the position endorsed by the majority, and therefore more likely to engage in extensive processing of the message and see the group with the numerically superior advantage as representing an objective consensus; this finding is congruent with Mackie's (1987) account. When both the source and the issue were of low relevance to targets holding no prior attitudes on the subject, the targets applied little cognitive effort to process the message, often using an accuracy heuristic favoring the majority (Erb et al. 1998).

Although the topic has been eliciting greater attention in recent years, the effects of perceived consensus on individuals' intergroup attitudes and behaviors, such as prejudice, stereotyping, and discrimination, has been a relatively underserved area of conformity research (Crandall et al. 2002, Stangor et al. 2001). Crandall et al. (2002) advocated a return to a social normative approach to study the phenomenon, finding an almost perfect correlation between individuals' likelihood of expressing or tolerating prejudice and their perceptions of the extent to which most others approve of those behaviors. Sechrist & Stangor (2001) found that higher prejudiced participants sat at a greater distance from an African American confederate than did those lower prejudiced participants; most interesting, however, was the finding that this difference was heightened when the participants learned that their attitudes were shared by a clear majority of other individuals.

Presumably, normative influences were the primary motivational forces operating in the aforementioned studies, indicating to the participants the kinds of beliefs that are generally accepted and encouraged by the majority. However, the perception of a consensus among group members' intergroup attitudes and behaviors is certain to exert an informational influence as well. Consistent with this suggestion, researchers have demonstrated that confidence in the accuracy of one's intergroup beliefs over time is a positively related function of the perceived level of consensus (cf. Stangor et al. 2001). Other researchers (e.g., Schaller & Latané 1996) have examined the consensually shared nature of stereotypes in more dynamic environments. Kenrick et al. (2002) suggest that the kinds of stereotypes that are most communicable (and therefore most likely to be shared) are those that provide accurate, functional information relevant to vital social motivations such as self-protection.

DYNAMICAL SYSTEMS Much like the majority of social psychological research, traditional investigations of conformity phenomena have been dominated by static social influence environments described by relatively microlevel theories (Vallacher et al. 2003). Recent years, however, have been marked by an increased emphasis on the processes that drive conformity in more fluid, complex systems and on the group-level consequences of dynamic behavior and belief shifts over time. Based on the more unidimensional social impact theory (SIT; Latané 1981), Latané developed dynamic social impact theory (DSIT; 1996) to explain the higher-order processes that emerge over time from local-level conformity within multiple-person assemblages of varying sizes, functions, complexities, and levels of interpersonal interaction. One of the central postulates on which the theory is founded is that, all else being equal, an individual occupying a given social space will be more likely to conform to the attitudes, beliefs, and behavioral propensities exhibited by the local numerical majority than by either the local numerical minority (for exceptions, see Nowak & Vallacher 2001) or less proximate persons. Influence at the local levels may be informational, normative, or both. The model predicts four core forms of self-organization emerging within the aggregate: (a) clustering of attitudes (or opinions, behavioral tendencies, etc.) in social space; (b) a reduction in diversity via a consolidation of attitudes; (c) correlations across attitudes possessed by cluster members; and (d) continuing diversity (i.e., lack of complete convergence) of attitudes. Regarding this last point, clusters of individuals sharing the minority attitude rarely dissolve because each member of that cluster is surrounded by a local numerical majority of individuals holding that same minority attitude; that is, as a general rule, the self-reinforcing nature of clusters tends to perpetuate their existence once they are formed.

Computer simulations, the most common methodology utilized to assess the validity of the theory's assertions, have provided much support for DSIT and related dynamical systems theories (Nowak & Vallacher 1998). Experimental, archival, and field study data also confirm the predictions laid out by these models (Bourgeois 2002). Dynamical systems theories have also successfully modeled large-scale societal transitions, such as the economic and political transformations that occurred

in Poland after the fall of Communism (Nowak & Vallacher 2001). Recent efforts to integrate dynamical systems and evolutionary psychological perspectives have also proved fruitful in understanding the emergence of both universal as well as culture-specific functional social norms (Kenrick et al. 2002), an area that will likely be of burgeoning interest to social psychologists in the future.

AUTOMATIC ACTIVATION Up to this point, we have reported on conformity research in which the motivation to conform to others is initiated, at least to some degree, within the target's awareness. Conformity may also be the product of the less mindful activation of accuracy- or affiliation-oriented goals, providing an adaptive shortcut that maximizes the likelihood of effective action with minimal expense to one's cognitive resources (Chartrand & Bargh 1999). Epley & Gilovich (1999) demonstrated that individuals primed with words conceptually related to conformity were more likely than those primed with neutral words to adhere to subjective evaluations made by a group of confederates. Participants primed with nonconformity terms, however, were no more likely to deviate from the confederates' responses than those primed with neutral terms. Yet, in a theoretically similar experiment, Pendry & Carrick (2001) found that participants primed with a nonconformist association (skinhead punk) or a conformist association (accountant) were respectively less or more likely to conform to others' objective judgments relative to a control; but the effects of the nonconformist prime were stronger. The observed asymmetries in priming effects both within and between the two studies suggests that future investigations into the automatic activation of conformity-related goals should give careful consideration to participants' semantic interpretations of the stimuli used to represent intended priming constructs.

Goal of Affiliation

BEHAVIORAL MIMICRY Interest has resurged in a conformity phenomenon known as behavioral mimicry, which appears to operate completely outside of conscious awareness. Also dubbed the chameleon effect, the term describes behavior matching of postures, facial expressions, vocal characteristics, and mannerisms that occurs between two or more individuals (Chartrand & Bargh 1999).

Chartrand & Bargh (1999) found that participants nonconsciously conformed their facial expressions and mannerisms to closely mirror a confederate's gestures. In addition, individuals exposed to an interaction partner who mimicked their behaviors increased their affinity for that person, which suggests that the process is functional in building rapport and promoting the development of social relationships (Chartrand & Bargh 1999; see also Hess et al. 1999). The authors argued that the mediating mechanism responsible for the effect is the perception-behavior link (see Dijksterhuis & Bargh 2001). That is, individuals' perceptual representations of others' behaviors nonconsciously and directly activate mannerism-specific behavioral representations that manifest themselves in the individuals' mimicking actions. Thus, behavior matching is more likely to occur in circumstances that

priming
could bias
conformity
to non-
conformity
responses

could bias conform
answers to all more

enhance a would-be imitator's attentional focus on others (Gump & Kulik 1997) and less likely to occur in situations that diminish external focus (Sanchez-Burks 2002) or specifically motivate internal focus (Johnston 2002).

Although the evidence suggests that the direct link from perception to behavior operates irrespective of the motivation to affiliate (Chartrand & Bargh 1999), Lakin & Chartrand (2003) reasoned that the effects of behavioral mimicry might be amplified in circumstances in which that goal was activated. The researchers triggered individuals' affiliation goals via either explicit (expected interaction) or implicit (priming) methods. They found that regardless of whether the participants were consciously aware of these goals, those motivated to affiliate mimicked the behaviors of a confederate to a greater extent than those in the control condition. Furthermore, a second study revealed that the chameleon effect and its subsequent impact on rapport building were augmented when participants' nonconscious goals to affiliate were first thwarted. Thus, it appears likely that relationship-oriented objectives do play a part in many of our everyday experiences with behavioral mimicry. Lakin & Chartrand (2003) proposed that ephemeral affiliation desires briefly strengthen the perception-behavior link because of increased attention to relevant environmental stimuli, an explanation that can be extended to more chronic affiliative goals as well (Chartrand & Bargh 1999).

Can we ask one about mimicry?

GAINING SOCIAL APPROVAL Unlike the subtleties characteristic of behavioral mimicry, individuals often engage in more conscious and deliberate attempts to gain the social approval of others, to build rewarding relationships with them, and in the process, to enhance their self-esteem. Conformity offers such an opportunity, although the extent to which the phenomenon is not only socially prescribed, but also normatively embraced, differs across cultures. In a meta-analysis of conformity studies employing Asch-like line judgment tasks, Bond & Smith (1996) showed that residents of collectivist countries were more inclined to conform to the estimates of a group of confederates than were residents of individualistic countries. Similarly, Cialdini et al. (1999) found that when considering whether to comply with a request, participants were more likely in a collectivistic country (Poland) than in an individualistic country (the United States) to base their decisions on the actions of their peers. Kim & Markus (1999) argued that cultures assign very different meanings to the concepts of conformity and nonconformity; specifically, nonconformity represents deviance in East Asian cultures but uniqueness in Western cultures. The authors demonstrated that the culturally assigned meanings attached to these concepts are evident in each culture's respective magazine ads, and manifested themselves in participants' preferences and choices for objects. For example, when asked to make a selection out of an array containing pens of two colors—one color in the majority and the other color in the minority—East Asians tended to pick the pen characterized by the majority color, whereas Americans were inclined to choose the pen marked by the less common color.

Researchers have also continued to investigate the extent to which affiliation and self-image enhancement goals are activated and strengthened when an individual's

Conscious - good to ask about

self-esteem is threatened by the prospect (or actual occurrence) of not fitting in with the group. Tatarodi et al. (2002) argued that racial minorities who possess bicultural identities and who are oriented toward personal cultural integration with or assimilation by the host culture carry with them the burden of knowing that their physical appearance may designate them for social exclusion by the majority. They reported that Chinese Canadian participants were more likely to conform their subjective judgments of artwork to those made by European Canadians (but not other Chinese Canadians) only after viewing their own reflections in a mirror; the data suggest normative motives, in particular, had been activated. Williams et al. (2000) demonstrated the potent influence of overt social exclusion over the Internet, a domain whose inherent anonymity suggests the negative effects of ostracism might be attenuated. Despite the potentially mitigating role of privacy, the authors nonetheless found that participants who were ignored in a virtual ball toss game were more likely to report lower self-esteem and a greater need for belongingness, and conformed more to the judgments of a completely different group in a later task. It is also clear that individuals need not suffer rejection nor ridicule from others firsthand in order to actively (but not necessarily consciously) pursue goals related to social approval and self-esteem via conformity. For example, in one study, participants who watched a videotape in which a person humorously ridiculed another were more inclined than those who viewed other scenes (i.e., no humorous ridicule or a person engaging in humorous self-ridicule) to match their opinions to those of other ostensible participants (Janes & Olson 2000). Taken together, these results suggest that even when not directly, personally, or publicly the target of others' disapproval, individuals may be driven to conform to restore their sense of belonging and their self-esteem.

Goal of Maintaining a Positive Self-Concept

As we have already described, people are frequently motivated to conform to others' beliefs and behaviors in order to enhance, protect, or repair their self-esteem. Following this logic, one way to combat conformity behavior might be to affirm individuals' self-concepts. Accordingly, one study revealed that individuals who focused on a fundamental foundation of their self-worth, such as a self-attribute, were less likely to conform later to others' opinions than were control participants or those who focused on an external source of self-esteem, such as an achievement (Arndt et al. 2002).

Deviating from the attitudes and actions of others at times may also act in service of these self-esteem-related goals by helping to provide individuals with a sense of uniqueness and personal identity (Blanton & Christie 2003, Kim & Markus 1999, Nail et al. 2000). Yet, individuals also maintain positive self-assessments by identifying with and conforming to valued groups (Brewer & Roccas 2001, Pool et al. 1998). This latter point provides the basis for the self-categorization perspective on majority and minority influence, as well as recent research on deindividuation effects on conformity.

Ask about
fear of
ostracism
★

Annu. Rev. Psychol. 2004.55:591-621. Downloaded from www.annualreviews.org. Access provided by University of Colorado - Boulder on 02/21/20. For personal use only.

might this
be a
conform
★

MAJORITY AND MINORITY INFLUENCE The extent to which one identifies with a message source—be it a majority or a minority—is a significant factor in determining the information processing strategies one employs as well as the outcome of an influence attempt (David & Turner 2001). One view of majority and minority influence that appears to be garnering increasing interest and support is the self-categorization perspective (Turner 1985). Self-categorization theory holds that the conventional distinction between informational and normative influence creates a false dichotomy because the two processes are interrelated in most cases; normativeness implies accuracy, and vice versa (David & Turner 2001). The theory posits that individuals categorize themselves at varying degrees of abstraction, and use their social identities to reduce uncertainty when faced with prospective group conflict. In support of self-categorization considerations, the classic effects of majority and minority influence have been found only in situations in which the source is an ingroup member. When they are outgroup members, irrespective of source status, participants tend to engage in no attitude change (Alvaro & Crano 1997) or to move their opinions in the direction opposite of the advocated position (David & Turner 1996).

David & Turner (1999) argued that when an ingroup minority attempts to persuade a target, the message recipient becomes pressured to provide a direct and public response within a short period. The situational forces that characterize the interaction highlight for the target the divergence between the ingroup majority position, which connotes correctness, and the argument advanced by the ingroup minority. When the immediacy and public nature of the circumstances is no longer pressing, and the salience of that prior conflict wanes, the target's frame of reference expands to incorporate the outgroup, leading the target to perceive the ingroup minority as similar to the self. The target is then more likely to manifest these perspective changes (and the subsequent influence of the ingroup minority) on delayed, private, and less direct measures. Several studies yielded indirect evidence consistent with their account (David & Turner 1999).

Also based on the notion that targets often share a common identity with the minority group, Alvaro & Crano (1997) suggested that an ingroup minority provokes indirect change—that is, change in a target's attitude toward matters related to the focal issue, but not toward the focal issue itself—because the message recipient (a) elaborately processes the information because of its distinctive source, (b) wishes to avoid identification with the source, (c) is motivated not to denigrate the source or counterargue the message in the name of ingroup solidarity, and (d) experiences an imbalance in the system of beliefs surrounding his or her focal attitude. The target works within these constraints to resolve the destabilization of the relevant cognitive constellation by changing his or her attitude on interrelated issues rather than on the focal issue, which reduces tension by restoring stability to the belief structure (Alvaro & Crano 1997). Crano & Chen (1998) proposed that this shift in related attitudes would provoke a further cognitive imbalance between the newly changed related attitudes and the unmoved focal attitude; this cognitive incongruence would be redressed over time by eventually changing one's focal attitude to comport with the recently shifted attitudes. Crano and colleagues (Alvaro

& Crano 1997, Crano & Chen 1998) found strong correlational support for these hypotheses.

DEINDIVIDUATION EFFECTS Self-categorization theory has also been offered as an explanation for conformity-related deindividuation phenomena in the form of the Social Identity model for Deindividuation Effects (SIDE; Reicher et al. 1995). The SIDE model distinguishes itself from classical deindividuation accounts in that “responsiveness to a group norm is not a mindless or irrational process reflecting a reduced sense of self . . . but may be a conscious and rational process relating to a meaningful sense of identity” (Spears et al. 2001, p. 336). In support of the predictions laid out by the SIDE model, a meta-analysis conducted by Postmes & Spears (1998) revealed that rather than engage in antinormative activities, individuals subjected to deindividuation procedures instead conformed their behaviors to local, situation-specific norms defined by the group identity.

Computer-mediated communication, a context capable of creating anonymity and physical isolation, has been the favored paradigm for investigating the SIDE model (Spears et al. 2001). Using this setting, Postmes et al. (2001) showed that members of anonymous groups unwittingly primed with a particular group norm were more likely to follow (and socially transmit) that norm than were members of identifiable groups, an effect mediated by their identification with the group. It is noteworthy, however, that these behaviors are related to cognitive processes rather than strategic motives, in which self-presentational concerns would be paramount. Thus, the differential effects of anonymity and identifiability may be reversed—that is, identifiable individuals may be more likely to adhere to group norms than anonymous individuals—when group members face social sanctions for norm deviance (Sassenberg & Postmes 2002).

Visually anonymous groups have also been found to engage in greater group-related self-categorization, which serves to augment affiliative factors such as group attraction both directly and indirectly (Lea et al. 2001; but see Sassenberg & Postmes 2002). In further support of the SIDE account, common-identity groups (in which members perceive a common social identity with the entire group) exhibit greater group salience and are more likely to induce conformity to group norms than are common-bond groups (characterized by bonds between individual group members) when members are anonymous (Sassenberg 2002); some evidence suggests that the opposite may be true when members are identifiable (Spears et al. 2001).

CONCLUSION

In our review of the current literature, we emphasized three core motivations that provide the bases for targets’ responses to influence attempts: accuracy, affiliation, and the maintenance of a positive self-concept. For clarity and ease of treatment, we associated each social influence-related phenomenon with whichever goal appeared to be the principal driving force underlying the occurrence of that phenomenon. However, it should be noted that targets’ behaviors often serve multiple

goals. For example, self-categorization theory holds that conforming to valued ingroup members may fulfill all three goals. We also examined the extent to which targets were mindful of the activation of these goals and of external influences in general, finding that recent research has tended to favor social influence processes that are subtle, indirect, heuristic-based, and outside of awareness. This is consistent with the recent movement in social psychology toward the demonstration of nonconscious goal activation and automaticity in everyday life (e.g., Bargh & Chartrand 1999). We expect this trend will persist in future years.

It is noteworthy that although this review has focused almost exclusively on recent developments in the areas of compliance and conformity, many of the field's classic investigations are relevant in today's research, albeit in different forms. A great deal of empirical work continues to explore the mediators and moderators of traditional compliance tactics, such as the foot-in-the-door and the door-in-the-face techniques. The early work on conformity conducted by Asch (1956) and Deutsch & Gerard (1955) has made a lasting contribution to our understanding of how multiple goals operate in social influence settings. And Milgram's (1974) research on obedience to authority continues to spur debate on several levels, including interpretation of the original results, questions of external validity, ethical concerns, and issues relating to the presentation of the material to others.

Although social influence research appears to be firmly embedded in its historical roots, it has not remained stagnant. Investigators have employed new methodologies to clarify the mechanisms operating in traditional phenomena, proposed integrative theories and models of social influence (see Nail et al. 2000, MacDonald et al. 2003, Vallacher et al. 2003), and begun to examine relatively unexplored topics, such as resistance-related influence strategies, dynamical systems, and cross-cultural research. In sum, the evidence suggests that scholarly work in compliance and conformity research will be a source of clarification, innovation, and lively deliberation for years to come.

ACKNOWLEDGMENTS

Preparation of this chapter was supported by a National Science Foundation Graduate Research Fellowship provided to the second author. We gratefully acknowledge Jenessa Shapiro, Jon Maner, and Christopher Wilbur for their very valuable comments on an earlier version of the manuscript.

The *Annual Review of Psychology* is online at <http://psych.annualreviews.org>

LITERATURE CITED

- Alvaro EM, Crano WD. 1997. Indirect minority influence: evidence for leniency in source evaluation and counterargumentation. *J. Personal. Soc. Psychol.* 72:949–64
- Arndt J, Schimel J, Greenberg J, Pyszczynski T. 2002. The intrinsic self and defensive-ness: evidence that activating the intrinsic self reduces self-handicapping and conformity. *Personal. Soc. Psychol. Bull.* 28:671–83

- Asch SE. 1956. Studies of independence and conformity: a minority of one against a unanimous majority. *Psychol. Monogr.* 70:(9) Whole No. 416
- Ashford BE, Anand V. 2003. The normalization of corruption in organizations. In *Research in Organizational Behavior*, ed. BM Staw, RM Kramer, Vol. 25. Greenwich, CT: JAI. In press
- Bargh JA, Chartrand TL. 1999. The unbearable automaticity of being. *Am. Psychol.* 54:462–79
- Bem DJ. 1972. Self-perception theory. In *Advances in Experimental Social Psychology*, ed. L Berkowitz, 6:1–62. New York: Academic
- Berkowitz L. 1999. Evil is more than banal: situationism and the concept of evil. *Personal. Soc. Psychol. Rev.* 3:246–53
- Blanton H, Christie C. 2003. Deviance regulation: a theory of identity and action. *Rev. Gen. Psychol.* 7:115–49
- Blass T. 1999. The Milgram paradigm after 35 years: some things we now know about obedience to authority. *J. Appl. Soc. Psychol.* 29:955–78
- Bond R, Smith PB. 1996. Culture and conformity: a meta-analysis of studies using Asch's (1952, 1956) line judgment task. *Psychol. Bull.* 119:111–37
- Boster FJ, Mitchell MM, Lapinski MK, Cooper H, Orrego VO, Rienke R. 1999. The impact of guilt and type of compliance-gaining message on compliance. *Commun. Monogr.* 66:168–77
- Bourgeois MJ. 2002. Heritability of attitudes constrains dynamic social impact. *Personal. Soc. Psychol. Bull.* 28:1063–72
- Brewer MB, Roccas S. 2001. Individual values, social identity, and optimal distinctiveness. In *Individual, Self, Relational Self, Collective Self*, ed. C Sedikides, MB Brewer, pp. 219–37. Philadelphia, PA: Psychology Press
- Brief AP, Buttram RT, Dukerich JM. 2001. Collective corruption in the corporate world: toward a process model. In *Groups at Work: Advances in Theory and Research*, ed. ME Turner, pp. 471–99. Hillsdale, NJ: Erlbaum
- Brief AP, Buttram RT, Elliot JD, Reizenstein RM, McCline RL. 1995. Releasing the beast: a study of compliance with orders to use race as a selection criterion. *J. Soc. Issues* 51:177–94
- Burger JM. 1986. Increasing compliance by improving the deal: the that's-not-all technique. *J. Personal. Soc. Psychol.* 51:277–83
- Burger JM. 1999. The foot-in-the-door compliance procedure: a multiple-process analysis and review. *Personal. Soc. Psychol. Rev.* 3:303–25
- Burger JM, Caldwell DF. 2003. The effects of monetary incentives and labeling on the foot-in-the-door effect: evidence for a self-perception process. *Basic Appl. Soc. Psychol.* 25:235–41
- Burger JM, Cornelius T. 2003. Raising the price of agreement: public commitment and the low-ball compliance procedure. *J. Appl. Soc. Psychol.* In press
- Burger JM, Guadagno RE. 2003. Self-concept clarity and the foot-in-the-door procedure. *Basic Appl. Soc. Psychol.* 25:79–86
- Burger JM, Horita M, Kinoshita L, Roberts K, Vera C. 1997. Effects of time on the norm reciprocity. *Basic Appl. Soc. Psychol.* 19:91–100
- Burger JM, Messian N, Patel S, del Prado A, Anderson C. 2003. What a coincidence! The effects of incidental similarity on compliance. *Personal. Soc. Psychol. Bull.* In press
- Burger JM, Reed M, DeCesare K, Rauner S, Rozolios J. 1999. The effect of initial request size on compliance: more about the that's-not-all technique. *Basic Appl. Soc. Psychol.* 21:243–49
- Burger JM, Soroka S, Gonzago K, Murphy E, Somervell E. 2001. The effect of fleeting attraction on compliance to requests. *Personal. Soc. Psychol. Bull.* 27:1578–86
- Campbell JD, Trapnell PD, Heine SJ, Katz IM, Lavellee LF, Lehman DR. 1996. Self-concept clarity: measurement, personality correlates, and cultural boundaries. *J. Personal. Soc. Psychol.* 59:538–49
- Castelli L, Vanzetto K, Sherman SJ, Arcuri L. 2001. The explicit and implicit perception of

- in-group members who use stereotypes: blatant rejection but subtle conformity. *J. Exp. Soc. Psychol.* 37:419–26
- Chartrand TL, Bargh JA. 1999. The chameleon effect: the perception-behavior link and social interaction. *J. Personal. Soc. Psychol.* 76: 893–910
- Chartrand TL, Pinckert S, Burger JM. 1999. When manipulation backfires: the effects of time delay and requester on the foot-in-the-door technique. *J. Appl. Soc. Psychol.* 29: 211–21
- Cialdini RB. 2001. *Influence: Science and Practice*. Boston, MA: Allyn & Bacon. 4th ed.
- Cialdini RB. 2003. Crafting normative messages to protect the environment. *Curr. Dir. Psychol. Sci.* 12:105–9
- Cialdini RB, Cacioppo JT, Bassett R, Miller JA. 1978. Low-ball procedure for producing compliance: commitment then cost. *J. Personal. Soc. Psychol.* 36:463–76
- Cialdini RB, Goldstein NJ. 2002. The science and practice of persuasion. *Cornell Hotel Restaur. Adm. Q.* 43:40–50
- Cialdini RB, Kallgren CA, Reno RR. 1991. A focus theory of normative conduct: a theoretical refinement and reevaluation of the role of norms in human behavior. In *Advances in Experimental Social Psychology*, ed. MP Zanna, 24:201–34. San Diego, CA: Academic
- Cialdini RB, Trost MR. 1998. Social influence: social norms, conformity, and compliance. In *The Handbook of Social Psychology*, ed. DT Gilbert, ST Fiske, G Lindzey, 2:151–92. Boston: McGraw-Hill. 4th ed.
- Cialdini RB, Trost MR, Newsom JT. 1995. Preference for consistency: the development of a valid measure and the discovery of surprising behavioral implications. *J. Personal. Soc. Psychol.* 69:318–28
- Cialdini RB, Vincent JE, Lewis SK, Catalan J, Wheeler D, Darby BL. 1975. Reciprocal concessions procedure for inducing compliance: the door-in-the-face technique. *J. Personal. Soc. Psychol.* 31:206–15
- Cialdini RB, Wosinska W, Barrett DW, Butner J, Gornik-Durose M. 1999. Compliance with a request in two cultures: the differential influence of social proof and commitment/consistency on collectivists and individualists. *Personal. Soc. Psychol. Bull.* 25:1242–53
- Cioffi D, Garner R. 1996. On doing the decision: effects of active versus passive choice on commitment and self-perception. *Personal. Soc. Psychol. Bull.* 22:133–44
- Crandall CS, Eshleman A, O'Brien L. 2002. Social norms and the expression and suppression of prejudice: the struggle for internalization. *J. Personal. Soc. Psychol.* 82:359–78
- Crano WD, Chen X. 1998. The leniency contract and persistence of majority and minority influence. *J. Personal. Soc. Psychol.* 74:1437–50
- Cross SE, Madson L. 1997. Models of the self: self-construals and gender. *Psychol. Bull.* 122:5–37
- Darley JM. 1995. Constructive and destructive obedience: a taxonomy of principal-agent relationships. *J. Soc. Issues* 51:125–54
- Darley JM. 2001. The dynamics of authority in organization. See Darley et al. 2001, pp. 37–52
- Darley JM, Messick DM, Tyler TR, eds. 2001. *Social Influences on Ethical Behavior in Organizations*. Mahwah, NJ/London: Erlbaum
- David B, Turner JC. 1996. Studies in self-categorization and minority conversion: Is being a member of the outgroup an advantage? *Br. J. Soc. Psychol.* 35:179–200
- David B, Turner JC. 1999. Studies in self-categorization and minority conversion: the ingroup minority in intragroup and intergroup contexts. *Br. J. Soc. Psychol.* 38:115–34
- David B, Turner JC. 2001. Majority and minority influence: a single process self-categorization analysis. In *Group Consensus and Minority Influence: Implications for Innovation*, ed. CKW De Dreu, NK De Vries, pp. 91–121. Malden, MA: Blackwell
- Davis BP, Knowles ES. 1999. A disrupt-then-reframe technique of social influence. *J. Personal. Soc. Psychol.* 76:192–99

- Deutsch M, Gerard HB. 1955. A study of normative and informative social influences upon individual judgment. *J. Abnorm. Soc. Psychol.* 51:629–36
- Dijksterhuis A, Bargh JA. 2001. The perception-behavior expressway: automatic effects of social perception on social behavior. In *Advances in Experimental Social Psychology*, ed. MP Zanna, 33:1–40. San Diego, CA: Academic
- Dillard JP, Hunter JE, Burgoon M. 1984. Sequential-request persuasive strategies: meta-analysis of foot-in-the-door and door-in-the-face. *Hum. Commun. Res.* 10:461–88
- Dolinski D. 2000. On inferring one's beliefs from one's attempt and consequences for subsequent compliance. *J. Personal. Soc. Psychol.* 78:260–72
- Dolinski D, Nawrat M. 1998. "Fear-then-relief" procedure for producing compliance: beware when the danger is over. *J. Exp. Soc. Psychol.* 34:27–50
- Dolinski D, Nawrat M, Rudak I. 2001. Dialogue involvement as a social influence technique. *Personal. Soc. Psychol. Bull.* 27:1395–406
- Elms AC. 1995. Obedience in retrospect. *J. Soc. Issues* 51:21–32
- Emans BJM, Munduate L, Klaver E, van de Vliert E. 2003. Constructive consequences of leaders' forcing influence styles. *Appl. Psychol.: Int. Rev.* 52:36–54
- Epley N, Gilovich T. 1999. Just going along: nonconscious priming and conformity to social pressure. *J. Exp. Soc. Psychol.* 35:578–89
- Erb HP, Bohner G, Rank S, Einwiller S. 2002. Processing minority and majority communications: the role of conflict with prior attitudes. *Personal. Soc. Psychol. Bull.* 28:1172–82
- Erb HP, Bohner G, Schmalzle K, Rank S. 1998. Beyond conflict and discrepancy: cognitive bias in minority and majority influence. *Personal. Soc. Psychol. Bull.* 24:620–33
- Fern EF, Monroe KB, Ramon AA. 1986. Effectiveness of multiple request strategies: a synthesis of research results. *J. Mark. Res.* 23:144–52
- Forgas JP. 1995. Mood and judgment: the affect infusion model (AIM). *Psychol. Bull.* 117:39–66
- Forgas JP. 1998a. Asking nicely? The effects of mood on responding to more or less polite requests. *Personal. Soc. Psychol. Bull.* 24:173–85
- Forgas JP. 1998b. On feeling good and getting your way: mood effects on negotiation strategies and outcomes. *J. Personal. Soc. Psychol.* 74:565–77
- Forgas JP. 1999. Feeling and speaking: mood effects on verbal communication strategies. *Personal. Soc. Psychol. Bull.* 25:850–63
- Forgas JP. 2001. On being moody but influential: the role of affect in social influence strategies. See Forgas & Williams 2001, pp. 147–66
- Forgas JP, Williams KD, eds. 2001. *Social Influence: Direct and Indirect Processes*. Philadelphia/Hove, UK: Psychology Press
- Freedman JL, Fraser SC. 1966. Compliance without pressure: the foot-in-the-door technique. *J. Personal. Soc. Psychol.* 4:195–202
- French J, Raven B. 1959. The bases of social power. In *Studies in Social Power*, ed. D Cartwright, pp. 150–67. Ann Arbor, MI: Inst. Soc. Res.
- Gilbert DT. 1991. How mental systems believe. *Am. Psychol.* 46:107–19
- Goldhagen DJ. 1996. *Hitler's Willing Executioners: Ordinary Germans and the Holocaust*. New York: Knopf
- Gorassini DR, Olson JM. 1995. Does self-perception change explain the foot-in-the-door effect? *J. Personal. Soc. Psychol.* 69: 91–105
- Gordon RA. 1996. Impact of ingratiation on judgments and evaluations: a meta-analytic investigation. *J. Personal. Soc. Psychol.* 71: 54–70
- Gouldner AW. 1960. The norm of reciprocity: a preliminary statement. *Am. Sociol. Rev.* 25:161–78
- Guadagno RE, Asher T, Demaine LJ, Cialdini RB. 2001. When saying yes leads to saying no: preference for consistency and the reverse

- foot-in-the-door effect. *Personal. Soc. Psychol. Bull.* 27:859–67
- Guéguen N, Pascual A, Dago L. 2002. Lowball and compliance to a request: an application in a field setting. *Psychol. Rep.* 91:81–84
- Gump BB, Kulik JA. 1997. Stress, affiliation, and emotional contagion. *J. Personal. Soc. Psychol.* 72:305–19
- Hale JL, Laliker M. 1999. Explaining the door-in-the-face: Is it really time to abandon reciprocal concessions? *Commun. Stud.* 50:203–10
- Heine SJ, Lehman DR. 1997. Culture, dissonance, and self-affirmation. *Personal. Soc. Psychol. Bull.* 23:389–400
- Heine SJ, Lehman DR, Markus HR, Kitayama S. 1999. Is there a universal need for positive self-regard? *Psychol. Rev.* 106:766–94
- Hess U, Philippot P, Blairy S. 1999. Mimicry: fact and fiction. In *The Social Context of Nonverbal Behavior*, ed. P Philippot, RS Feldman, EJ Coates, pp. 213–41. Cambridge, UK/New York: Cambridge Univ. Press
- Howard DJ, Gengler CE, Jain A. 1995. What's in a name? A complimentary means of persuasion. *J. Consum. Res.* 22:200–11
- Howard DJ, Gengler CE, Jain A. 1997. The name remembrance effect: a test of alternative explanations. *J. Soc. Behav. Personal.* 12:801–10
- Janes LM, Olson JM. 2000. Jeer pressure: the behavioral effects of observing ridicule of others. *Personal. Soc. Psychol. Bull.* 26:474–85
- Johnston L. 2002. Behavioral mimicry and stigmatization. *Soc. Cogn.* 20:18–35
- Kahan D. 1997. Social influence, social meaning, and deterrence. *VA. Law Rev.* 83:349–95
- Kallgren CA, Reno RR, Cialdini RB. 2000. A focus theory of normative conduct: when norms do and do not affect behavior. *Personal. Soc. Psychol. Bull.* 26:1002–12
- Kelln BRC, Ellard JH. 1999. An equity theory analysis of the impact of forgiveness and retribution on transgressor compliance. *Personal. Soc. Psychol. Bull.* 25:864–72
- Kenrick DT, Maner JK, Butner J, Li NP, Becker DV, Schaller M. 2002. Dynamical evolutionary psychology: mapping the domains of the new interactionist paradigm. *Personal. Soc. Psychol. Rev.* 6:347–56
- Kim HS, Markus HR. 1999. Deviance or uniqueness, harmony or conformity? A cultural analysis. *J. Personal. Soc. Psychol.* 77:785–800
- Knowles ES, Linn JA. 2003. Approach-avoidance model of persuasion: alpha and omega strategies for change. In *Resistance and Persuasion*, ed. ES Knowles, JA Linn. Mahwah, NJ: Erlbaum. In press
- Koslowsky M, Schwarzwald J. 2001. The power interaction model: theory, methodology, and empirical applications. In *The Use and Abuse of Power: Multiple Perspectives on the Causes of Corruption*, ed. AY Lee-Chai, JA Bargh, pp. 195–214. Philadelphia, PA: Psychology Press
- Koslowsky M, Schwarzwald J, Ashuri S. 2001. On the relationship between subordinates' compliance to power sources and organizational attitudes. *Appl. Psychol.: Int. Rev.* 50:455–76
- Lakin JL, Chartrand TL. 2003. Using nonconscious behavioral mimicry to create affiliation and rapport. *Psychol. Sci.* 14:334–39
- Latané B. 1981. The psychology of social impact. *Am. Psychol.* 36:343–56
- Latané B. 1996. Dynamic social impact: the creation of culture by communication. *J. Commun.* 46:13–25
- Lea M, Spears R, de Groot D. 2001. Knowing me, knowing you: anonymity effects on social identity processes within groups. *Personal. Soc. Psychol. Bull.* 27:526–37
- Lerner JS, Tetlock PE. 1999. Accounting for the effects of accountability. *Psychol. Bull.* 125:255–75
- Lutsky N. 1995. When is "obedience" obedience? Conceptual and historical commentary. *J. Soc. Issues* 51:55–66
- Lynn M, Simons T. 2000. Predictors of male and female servers' average tip earnings. *J. Appl. Soc. Psychol.* 30:241–52
- MacDonald G, Nail PR, Levy DA. 2003. Expanding the scope of the social response

- context model. *Basic Appl. Soc. Psychol.* In press
- Mackie DM. 1987. Systematic and nonsystematic processing of majority and minority persuasive communications. *J. Personal. Soc. Psychol.* 53:41–52
- Martin R, Hewstone M. 2001. Determinants and consequences of cognitive processes in majority and minority influence. See Forgas & Williams 2001, pp. 315–30
- McCall M. 1997. Physical attractiveness and access to alcohol: What is beautiful does not get carded. *J. Appl. Soc. Psychol.* 27:453–62
- Meade ML, Roediger HL III. 2002. Explorations in the social contagion of memory. *Mem. Cogn.* 30:995–1009
- Meeus WHJ, Raaijmakers QAW. 1995. Obedience in modern society: the Utrecht studies. *J. Soc. Issues* 51:155–76
- Milgram S. 1974. *Obedience to Authority*. New York: Harper & Row
- Millar M. 2002. Effects of a guilt induction and guilt reduction on door in the face. *Commun. Res.* 29:666–80
- Miller AG. 1995. Constructions of the obedience experiments: a focus upon domains of relevance. *J. Soc. Issues* 51:33–54
- Moscovici S. 1980. Toward a theory of conversion behavior. In *Advances in Experimental Social Psychology*, ed. L Berkowitz, 13:209–39. New York: Academic
- Mowen JC, Cialdini RB. 1980. On implementing the door-in-the-face compliance technique in a business context. *J. Mark. Res.* 17:253–58
- Nail PR, MacDonald G, Levy DA. 2000. Proposal of a four-dimensional model of social response. *Psychol. Bull.* 126:454–70
- Newman LS, Erber R, eds. 2002. *Understanding Genocide: The Social Psychology of the Holocaust*. Oxford/New York: Oxford Univ. Press
- Nowak A, Vallacher RR. 1998. *Dynamical Social Psychology*. New York: Guilford
- Nowak A, Vallacher RR. 2001. Societal transition: toward a dynamical model of social change. In *The Practice of Social Influence in Multiple Cultures*, ed. W Wosinska, RB Cialdini, DW Barrett, J Reykowski, pp. 151–71. Mahwah, NJ: Erlbaum
- O'Keefe DJ. 1999. Three reasons for doubting the adequacy of the reciprocal concessions explanation of door-in-the-face effects. *Commun. Stud.* 50:211–20
- O'Keefe DJ, Figgé M. 1997. A guilt-based explanation of the door-in-the-face influence strategy. *Hum. Commun. Res.* 24:64–81
- O'Keefe DJ, Figgé M. 1999. Guilt and expected guilt in the door-in-the-face technique. *Commun. Monogr.* 66:312–24
- O'Keefe DJ, Hale SL. 1998. The door-in-the-face influence strategy: a random-effects meta-analytic review. In *Communication Yearbook*, ed. ME Roloff, 21:1–33. Thousand Oaks, CA: Sage
- O'Keefe DJ, Hale SL. 2001. An odds-ratio-based meta-analysis of research on the door-in-the-face influence strategy. *Commun. Rep.* 14:31–38
- Pendry L, Carrick R. 2001. Doing what the mob do: priming effects on conformity. *Eur. J. Soc. Psychol.* 31:83–92
- Pennington J, Schlenker BR. 1999. Accountability for consequential decisions: justifying ethical judgments to audiences. *Personal. Soc. Psychol. Bull.* 25:1067–81
- Petersen LE, Dietz J. 2000. Social discrimination in a personnel selection context: the effects of an authority's instruction to discriminate and followers' authoritarianism. *J. Appl. Soc. Psychol.* 30:206–20
- Pollock CL, Smith SD, Knowles ES, Bruce HJ. 1998. Mindfulness limits compliance with the that's-not-all technique. *Personal. Soc. Psychol. Bull.* 24:1153–57
- Pool GJ, Wood W, Leck K. 1998. The self-esteem motive in social influence: agreement with valued majorities and disagreement with derogated minorities. *J. Personal. Soc. Psychol.* 75:967–75
- Postmes T, Spears R. 1998. Deindividuation and anti-normative behavior: a meta-analysis. *Psychol. Bull.* 123:238–59
- Postmes T, Spears R, Sakhel K, De Groot D. 2001. Social influence in computer-mediated communication: the effects of anonymity on

- group behavior. *Personal. Soc. Psychol. Bull.* 27:1243–54
- Quinn A, Schlenker BR. 2002. Can accountability produce independence? Goals as determinants of the impact of accountability on conformity. *Personal. Soc. Psychol. Bull.* 28:472–83
- Raven BH, Schwarzwald J, Koslowsky M. 1998. Conceptualizing and measuring a power/interaction model of interpersonal influence. *J. Appl. Soc. Psychol.* 28:307–22
- Reicher SD, Spears R, Postmes T. 1995. A social identity model of deindividuation phenomena. *Eur. Rev. Soc. Psychol.* 6:161–98
- Rind B. 1997. Effects of interest arousal on compliance with a request for help. *Basic Appl. Soc. Psychol.* 19:49–59
- Rind B, Strohmets D. 1999. Effect on restaurant tipping of a helpful message written on the back of customer's checks. *J. Appl. Soc. Psychol.* 29:139–44
- Rind B, Strohmets D. 2001. Effect on restaurant tipping of presenting customers with an interesting task and of reciprocity. *J. Appl. Soc. Psychol.* 31:1379–84
- Sagarin BJ, Cialdini RB, Rice WE, Serpa SB. 2002. Dispelling the illusion of invulnerability: the motivations and mechanisms of resistance to persuasion. *J. Personal. Soc. Psychol.* 83:526–41
- Sanchez-Burks J. 2002. Protestant relational ideology and (in)attention to relational cues in work settings. *J. Personal. Soc. Psychol.* 83:919–29
- Sassenberg K. 2002. Common bond and common identity groups on the internet: attachment and normative behavior in on-topic and off-topic chats. *Group Dynam.: Theory Res. Pract.* 6:27–37
- Sassenberg K, Postmes T. 2002. Cognitive and strategic processes in small groups: effects of anonymity of the self and anonymity of the group on social influence. *Br. J. Soc. Psychol.* 41:463–80
- Schaller M, Latané B. 1996. Dynamic social impact and the evolution of social representations: a natural history of stereotypes. *J. Commun.* 46:64–77
- Schlenker BR, Weigold MF. 1989. Self-identification and accountability. In *Impression Management in the Organization*, ed. RA Giacalone, P Rosenfeld, pp. 21–43. Hillsdale, NJ: Erlbaum
- Schultz PW. 1999. Changing behavior with normative feedback interventions: a field experiment on curbside recycling. *Basic Appl. Soc. Psychol.* 21:25–36
- Schwarzwald J, Koslowsky M, Agassi V. 2001. Captain's leadership type and police officers' compliance to power bases. *Eur. J. Work Organ. Psychol.* 10:273–90
- Sechrist GB, Stangor C. 2001. Perceived consensus influences intergroup behavior and stereotype accessibility. *J. Personal. Soc. Psychol.* 80:645–54
- Spears R, Postmes T, Lea M, Watt SE. 2001. A SIDE view of social influence. See Forgas & Williams 2001, pp. 331–50
- Stangor C, Sechrist GB, Jost JT. 2001. Social influence and intergroup beliefs: the role of perceived social consensus. See Forgas & Williams 2001, pp. 235–52
- Strohmets DB, Rind B, Fisher R, Lynn M. 2002. Sweetening the till: the use of candy to increase restaurant tipping. *J. Appl. Soc. Psychol.* 32:300–9
- Tafarodi RW, Kanf SJ, Milne AB. 2002. When different becomes similar: compensatory conformity in bicultural visible minorities. *Personal. Soc. Psychol. Bull.* 28:1131–42
- Turner JC. 1985. Social categorization and the self-concept: a social cognitive theory of group behavior. In *Advances in Group Processes*, ed. EJ Lawler, 2:77–122. Greenwich, CT: JAI
- Tusing KJ, Dillard JP. 2000. The psychological reality of the door-in-the-face: it's helping, not bargaining. *J. Lang. Soc. Psychol.* 19:5–25
- Tyler TR. 1997. The psychology of legitimacy. *Personal. Soc. Psychol. Rev.* 1:323–44
- Vallacher RR, Nowak A, Miller ME. 2003.

- Social influence. In *Comprehensive Handbook of Psychology: Personality and Social Psychology*, ed. MJ Lerner, T Millon, 5:383–417. New York: Wiley
- Vonk R. 2002. Self-serving interpretations of flattery: why ingratiation works. *J. Personal. Soc. Psychol.* 82:515–26
- Walther E, Bless H, Strack F, Rackstraw P, Wagner D, Werth L. 2002. Conformity effects in memory as a function of group size, dissenters and uncertainty. *Appl. Cogn. Psychol.* 16:793–810
- Whatley MA, Webster MJ, Smith RH, Rhodes A. 1999. The effect of a favor on public and private compliance: How internalized is the norm of reciprocity? *Basic Appl. Soc. Psychol.* 21:251–59
- Williams KP, Cheung CKT, Choi W. 2000. Cyberostricism: effects of being ignored over the internet. *J. Personal. Soc. Psychol.* 79:748–62
- Wood W. 2000. Attitude change: persuasion and social influence. *Annu. Rev. Psychol.* 51:539–70
- Wright DB, Self G, Justice C. 2000. Memory conformity: exploring misinformation effects when presented by another person. *Br. J. Psychol.* 91:189–202

CONTENTS

Frontispiece— <i>Walter Mischel</i>	xvi
PREFATORY	
Toward an Integrative Science of the Person, <i>Walter Mischel</i>	1
LEARNING AND MEMORY PLASTICITY	
On Building a Bridge Between Brain and Behavior, <i>Jeffrey D. Schall</i>	23
The Neurobiology of Consolidations, Or, How Stable is the Engram?, <i>Yadin Dudai</i>	51
BRAIN IMAGING/COGNITIVE NEUROSCIENCE	
Understanding Other Minds: Linking Developmental Psychology and Functional Neuroimaging, <i>R. Saxe, S. Carey, and N. Kanwisher</i>	87
SLEEP	
Hypocretin (Orexin): Role in Normal Behavior and Neuropathology, <i>Jerome M. Siegel</i>	125
SPEECH PERCEPTION	
Speech Perception, <i>Randy L. Diehl, Andrew J. Lotto, and Lori L. Holt</i>	149
DEPTH, SPACE, AND MOTION	
Visual Mechanisms of Motion Analysis and Motion Perception, <i>Andrew M. Derrington, Harriet A. Allen, and Louise S. Delicato</i>	181
ATTENTION AND PERFORMANCE	
Cumulative Progress in Formal Theories of Attention, <i>Gordon D. Logan</i>	207
MEMORY	
The Psychology and Neuroscience of Forgetting, <i>John T. Wixted</i>	235
FORM PERCEPTION AND OBJECT RECOGNITION	
Object Perception as Bayesian Inference, <i>Daniel Kersten,</i> <i>Pascal Mamassian, and Alan Yuille</i>	271
ADULTHOOD AND AGING	
Development in Midlife, <i>Margie E. Lachman</i>	305

DEVELOPMENT IN SOCIETAL CONTEXT

- The Intergenerational Transfer of Psychosocial Risk: Mediators of Vulnerability and Resilience, *Lisa A. Serbin and Jennifer Karp* 333

DEVELOPMENT IN THE FAMILY

- Development in the Family, *Ross D. Parke* 365

SCHIZOPHRENIA AND RELATED DISORDERS

- Schizophrenia: Etiology and Course, *Elaine Walker, Lisa Kestler, Annie Bollini, and Karen M. Hochman* 401

SUBSTANCE ABUSE DISORDERS

- Clinical Implications of Reinforcement as a Determinant of Substance Use Disorders, *Stephen T. Higgins, Sarah H. Heil, and Jennifer Plebani Lussier* 431

- Motivational Influences on Cigarette Smoking, *Timothy B. Baker, Thomas H. Brandon, and Laurie Chassin* 463

INFERENCE, PERSON PERCEPTION, ATTRIBUTION

- Self-Knowledge: Its Limits, Value, and Potential for Improvement, *Timothy D. Wilson and Elizabeth W. Dunn* 493

GENDER

- Gender in Psychology, *Abigail J. Stewart and Christa McDermott* 519

MASS MEDIA

- Mediated Politics and Citizenship in the Twenty-First Century, *Doris Graber* 545

NONVERBAL AND VERBAL COMMUNICATION

- The Internet and Social Life, *John A. Bargh and Katelyn Y.A. McKenna* 573

SOCIAL INFLUENCE

- Social Influence: Compliance and Conformity, *Robert B. Cialdini and Noah J. Goldstein* 591

SMALL GROUPS

- Group Performance and Decision Making, *Norbert L. Kerr and R. Scott Tindale* 623

PERSONALITY PROCESSES

- Creativity, *Mark A. Runco* 657

PSYCHOLOGY AND CULTURE

- Psychology and Culture, *Darrin R. Lehman, Chi-yue Chiu,
and Mark Schaller* 689

TEACHING OF SUBJECT MATTER

- Teaching of Subject Matter, *Richard E. Mayer* 715

PERSONALITY AND COPING STYLES

- Coping: Pitfalls and Promise, *Susan Folkman and Judith Tedlie Moskowitz* 745

SURVEY METHODOLOGY

- Survey Research and Societal Change, *Roger Tourangeau* 775

- Human Research and Data Collection via the Internet,
Michael H. Birnbaum 803

INDEXES

- Author Index 833

- Subject Index 877

- Cumulative Index of Contributing Authors, Volumes 45–55 921

- Cumulative Index of Chapter Titles, Volumes 45–55 926

ERRATA

- An online log of corrections to *Annual Review of Psychology* chapters
may be found at <http://psych.annualreviews.org/errata.shtml>